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Cover: Yellow-billed Cuckoo at Blackwater National Wildlife Refuge,
November 22, 1979. Photo by Debbie Dupree.

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AVIAN MORTALITY AT AN OFFICE BUILDING IN ANNAPOLIS, MARYLAND

Glenn D. Therres

Avian mortality as a result of collisions with man-made structures was reported in North America as early as the late 1800's (Dutcher 1884, Kumlien 1888). Since then, many accounts have been published reporting such collisions (consult Avery et al. 1980 for sources). Banks (1979) estimated that 31.6% of all human-related avian mortality results from collisions, including those along roadways, at towers, tall buildings, airport ceilometers, and picture windows. Klem (1979) estimated a minimum of 79.6 million birds die annually in the United States as a result of flying into windows of all types.

A number of studies have dealt with bird losses at radio and TV towers (Brewer and Ellis 1958, Stoddard and Norris 1967, Taylor and Anderson 1973, Seets and Bohlen 1977, Avery et al. 1978) and airport ceilometers (Spofford 1949, Howell et al. 1954). These studies dealt with periodic mass mortality at these tall structures, usually during migration periods. Mortality resulting from flying into towers occurs mainly to nocturnal migrants. It is estimated that 2,500 birds per tower per year are killed as a result of flying into these obstacles (Banks 1979).

Few comprehensive studies have dealt with avian mortality at lower structures such as houses, buildings, or factories. Mortality at these structures results primarily from birds flying into glass windows, particularly large ones. This paper presents the results of a two-year study of bird losses at an office building in Annapolis, Maryland. During the second year of the study, raptorial silhouettes were tested for their effectiveness in reducing avian mortality at the building.

STUDY AREA AND METHODS

The study was conducted at the Tawes State Office Building in suburban Annapolis. The building complex is located approximately 1.2 km northwest of downtown Annapolis, along Roscoe Rowe Boulevard. College Creek and numerous woodlots are in the immediate area, providing available habitat for a great variety of birds.

Tawes State Office Building is a series of 4 four-story buildings joined to each other at each level by passageways. Three of the buildings are oriented in a northwesterly direction, while the fourth is oriented in a northeasterly direction, resulting in an L-shaped complex. The buildings are faced with tinted glass, which has partially reflective properties. Between each building and at the ends of the two extreme buildings is an elevator and staircase enclosed in a concrete structure. Glassed-in walkways connect the buildings with these at each level. Transparent windows enclose each walkway on its sides, thus allowing unobstructed vision through either side of the passageways. Each window is 3.1 m long X 2.6 m tall. There are 64 such windows in the building complex. The building is landscaped with numerous trees, shrubs, and herbaceous plants, as well as with three ponds.

Searches for dead birds were made several times a week (usually 3 to 5 days) throughout the study period, from the fall of 1977 through the summer of 1979. The searches entailed walking around the perimeter of the building, looking for dead birds along the sidewalks, on the lawn, in the flower beds, or trapped in the various grates around the building. When a dead bird was found, the date, species of bird, and location around the building were recorded. No attempt was made to differentiate between sexes or age groups. Searches were usually made in the morning hours, generally between 0800 and 1000 EST. To reduce the possible influence of scavengers (Crawford 1971), dead birds were removed from the immediate area by the investigator.

During the second year of the study, falcon silhouettes were placed on the windows in the passageways to test their effectiveness in reducing avian mortality. The silhouettes were 19.5 cm long from head to tail, with a wingspan of 44 cm. They were obtained from the U. S. Fish and Wildlife Service's pamphlet entitled "Tricks to Control Birds." A silhouette was placed in the upper corner of each window in every passageway during the fall and winter of the second year. The falcon was taped to the window in a steep diving position as was recommended. During the spring and summer of the second year, the silhouettes were placed in the upper center of each window in the same diving position.

RESULTS AND DISCUSSION

Size and composition of losses -- During the two years of the study, 220 birds of 52 species were found dead as a result of flying against the building (Table 1). Twenty-four families of North American birds were represented. The most common species killed were Northern Junco (10.0%), Gray Catbird (8.2%), House Sparrow (7.3%), and House Finch (7.3%). Though the season of highest frequency of mortality was different for each of the four seasons, these birds have two characteristics in common. First, all four species occur in the surrounding area for an extended period of time. Secondly, all four species spend much of their time on or near the ground.

Table 1. Bird losses at the Tawes State Office Building,
fall of 1977 through summer of 1979

	Fall 1977	Winter 1977-78	Spring 1978	Summer 1978	Silhouettes present				Total
					Fall 1978	Winter 1978-79	Spring 1979	Summer 1979	
Mallard	-	-	-	-	1	-	-	-	1
Sharp-shinned Hawk	-	-	-	-	1	-	-	-	1
Common Bobwhite	-	-	-	1	-	-	-	1	2
Mourning Dove	-	-	-	2	4	-	-	1	7
Yellow-billed Cuckoo	1	-	-	-	1	-	-	1	3
Chimney Swift	-	-	1	-	-	-	-	1	2
Ruby-throated Hummingbird	-	-	-	-	1	-	1	1	3
Belted Kingfisher	-	-	-	-	1	-	-	-	1
Common Flicker	-	1	-	-	-	-	-	-	1
Downy Woodpecker	-	-	-	-	-	-	-	1	1
Acadian Flycatcher	1	-	-	-	1	-	-	-	2
Barn Swallow	-	-	2	4	-	-	-	5	11
Blue Jay	1	-	-	1	-	-	-	-	2
Carolina Chickadee	-	-	-	-	1	-	1	-	2
White-breasted Nuthatch	1	-	-	-	-	-	-	-	1
Brown Creeper	-	-	-	-	1	-	-	-	1
House Wren	-	-	-	-	-	-	1	-	1
Northern Mockingbird	2	-	-	-	-	-	-	-	2
Gray Catbird	3	-	2	3	6	-	1	3	16
Brown Thrasher	-	-	1	-	-	-	-	-	1
American Robin	-	-	1	3	1	-	2	2	9
Wood Thrush	-	-	1	-	2	-	1	-	4
Hermit Thrush	3	-	-	-	-	-	-	-	3
Swainson's Thrush	-	-	-	-	-	-	1	-	1
Veery	1	-	-	-	1	-	-	-	2
European Starling	-	1	-	-	-	-	-	2	3
Red-eyed Vireo	-	-	-	-	1	-	1	-	2
Black-and-White Warbler	-	-	2	-	-	-	-	-	2
Tennessee Warbler	1	-	-	-	2	-	-	-	3
Northern Parula Warbler	-	-	-	1	-	-	-	-	1
Cape May Warbler	-	-	-	-	1	-	-	-	1
Yellow-rumped Warbler	1	-	-	-	3	-	-	-	4
Blackpoll Warbler	-	-	-	-	2	-	1	-	3
Ovenbird	1	-	1	-	-	-	-	-	2
Northern Waterthrush	-	-	2	-	2	-	3	-	7
Kentucky Warbler	-	-	-	-	-	1	-	-	1
Common Yellowthroat	-	-	3	1	3	-	1	1	9
Wilson's Warbler	-	-	-	-	1	-	-	-	1
American Redstart	-	-	1	1	1	-	-	-	3
House Sparrow	-	1	-	7	2	-	1	5	16
Common Grackle	-	-	-	1	-	-	-	1	2
Brown-headed Cowbird	-	-	-	-	-	-	1	-	1
Northern Cardinal	1	-	-	-	2	-	-	-	3
Rose-breasted Grosbeak	-	-	-	-	2	-	-	-	2
Indigo Bunting	-	-	1	-	-	-	1	-	2
House Finch	-	-	2	10	-	-	-	4	16
Rufous-sided Towhee	-	-	-	-	1	-	-	-	1
Northern Junco	12	4	2	-	2	2	-	-	22
Field Sparrow	-	1	1	-	1	-	-	-	3
White-throated Sparrow	2	-	3	-	4	-	-	-	9
Swamp Sparrow	-	-	-	-	-	-	1	-	1
Song Sparrow	-	-	-	-	1	-	-	1	2
Unidentified	11	-	-	-	4	-	-	1	16
TOTAL (52 species)	42	8	26	35	56	3	19	31	220

Of all species killed, only 15.4% were strictly migrants in this area. These represented only 9.1% of the total kill. The remaining 90.9% were either permanent residents, breeding birds, or birds that winter in Maryland (Stewart and Robbins 1958). Although many breeding and wintering birds were killed while migrating, over 40% of this group was killed during non-migratory periods. Thus, the data suggest that the highest frequency of mortality was experienced by those species that occur in the area for an extended period of time.

Table 2. Composition by family of bird losses at the Tawes State Office Building, fall of 1977 through summer of 1979

	Fall 1977 - Summer 1978	Fall 1978 - Summer 1979	Total*
Swallows (Hirundinidae)	6	5	11 (5.3%)
Mimics (Mimidae)	11	10	21 (10.2%)
Thrushes (Turdidae)	9	10	19 (9.2%)
Warblers (Parulidae)	15	22	37 (18.0%)
House Sparrow (Ploceidae)	8	8	16 (7.8%)
Finches (Fringillidae)	41	22	63 (30.6%)
Others	12	27	39 (18.9%)
Total	102	104	206

*The totals in this table do not include 14 unidentified birds, but do include two sparrows that could not be identified to species.

Four of the six major families (Table 2) incurring mortality at the building consist primarily of birds generally terrestrial in habits (i.e., members of the families Mimidae, Turdidae, Ploceidae, and Fringillidae). Mortality occurring within these families accounted for 57.8% of the total mortality at the building. Johnson and Hudson (1976) found that 62.1% of the birds killed at a glassed-in walkway in Washington state belonged to three of the four families mentioned above. Add such species as Common Bobwhite, Mourning Dove, Ovenbird, and Common Yellowthroat to this list of ground-associated birds, and this further suggests the greater frequency of mortality at low man-made structures to those species that are generally most active near the ground.

The species composition of the kill of the present study differed from the results of a study conducted in Baltimore (Jewell and Jewell 1978). In the Baltimore study 46.2% of the kill consisted of Parulids, while only 18.0% of the kill in the present study were warblers. Also, six of the ten most common species killed at the Tawes State Office Building were not found at all in the Baltimore kill. These differences probably resulted from the different situations under which the two studies were conducted. The Baltimore study occurred at a 13-story building in the downtown area during the migration period only, while this study was conducted throughout the year at a much lower structure. Also, available avian habitat in the vicinity of the Baltimore study was minimal, while that was not the case here.

Seasonal variation of losses -- The seasonal distribution of the kill differed from that of other studies (Stoddard and Norris 1967, Johnson and Hudson 1976), which show highest mortality occurring during periods of migration. Mortality at the Tawes State Office Building was greatest in fall (44.5%) and summer (30.0%) instead of the expected fall and spring. This is compatible with the finding that greater mortality occurred to those species that are found in the area for an extended period of time. Thus, higher mortality occurred during the breeding season than during the spring migration period. Spring mortality (20.5%) was less than that of fall, as expected, because of fewer and more experienced birds migrating in the spring and the shorter period that each species is present as compared to fall. Winter mortality (5.0%) was expected to be low because of the smaller number of birds wintering in the area.

Location of losses -- Mortality at the Tawes State Office Building complex occurred in two ways. Either the bird was killed by flying into the partially reflective glass windows of the buildings themselves, or by flying into the transparent windows in the passageways.

Table 3. Location of bird losses at the Tawes State Office Building, fall of 1977 through summer of 1979

	Fall 1977 - Summer 1978	Fall 1978 - Summer 1979	Total
Passageway	81	72	153 (69.5%)
Building	30	37	67 (30.5%)
Total	111	109	220

Table 3 shows the number of birds killed by location for the two years of the study. The results show that 69.5% of all birds killed had collided with the windows in the passageways. Chi-square analysis shows this result differs significantly ($P < 0.05$) from an expected frequency proportional to available surface area. Apparently the birds mistook the glassed-in passageways for open air space. Klem (1979) found that birds do not discriminate between unobstructed habitat and habitat seen through windows. Thus, this high frequency of mortality seems to be the result of the birds failing to recognize that the buildings were connected by glass passageways, and therefore were killed while attempting to fly between the buildings in what they perceived as open space.

The direction from which the birds were flying before collision seems to have been completely random. Birds were found on all sides of the building and seemingly in numbers proportional to the surface area available. Jewell and Jewell (1978) and Klem (1979) have also noted that orientation seems to be random in bird-window collisions.

Effectiveness of silhouettes -- Because of the high frequency of mortality at the passageways, silhouettes were used during the second year of the study in an attempt to reduce this mortality. Table 3 shows

the results of the second year of the study as compared to the first. Prior to the use of silhouettes, 73.0% of the mortality occurred at the passageways, while 66.0% occurred there after silhouettes were placed in the passageways. Thus, the use of silhouettes reduced frequency of mortality at the passageways by only 7%. However, this frequency was not significantly different ($P > 0.05$) from the frequency observed without silhouettes present. Johnson and Hudson (1976) reduced mortality with the use of raptorial silhouettes to one-third the rate prior to their use. Klem (1979) also reported a reduction in bird-window collisions with the use of silhouettes. Therefore, the use of silhouettes may reduce mortality, but the amount of reduction can vary by location, species, time of year, and perhaps other factors.

Table 4. Location of mortality of the ten most common species killed at the Tawes State Office Building, fall of 1977 through summer of 1979.

	Fall 1977 - Summer 1978 passageway	Summer 1978 building	Fall 1978 - Summer 1979 passageway	Summer 1979 building
Mourning Dove	2	-	5	-
Barn Swallow	6	-	5	-
Gray Catbird	5	3	6	4
American Robin	1	3	2	3
Northern Waterthrush	1	1	2	3
Common Yellowthroat	3	1	1	4
House Sparrow	7	1	7	1
House Finch	12	-	4	-
Northern Junco	16	2	4	-
White-throated Sparrow	5	-	2	2

Locations of mortality of the ten most common species killed during the study are given in Table 4. Comparisons for each species by year suggest the effectiveness or ineffectiveness of silhouettes in reducing mortality at the passageways for these species. The use of silhouettes may have been effective in reducing mortality of Northern Juncos and House Sparrows at the building. Mortality was one-fourth and one-third the rate prior to the use of silhouettes for each species, respectively. Of course, this result assumes that there were similar numbers of birds present during both years of the study. Also, the data suggest that the use of silhouettes may have reduced mortality of Common Yellowthroats at the passageways, and possibly that of White-throated Sparrows. The use of silhouettes did not appear to reduce mortality for the other six species listed. It appears that the use of silhouettes may vary in effectiveness depending upon the bird species involved.

The location of the silhouette on the windows in the passageways did not change the effectiveness in the situations tested. When the silhouettes were placed in the upper corner of each window, 67.8% of the mortality occurred at the passageways, while 64.0% occurred there when the silhouettes were placed in the upper center of each window.

SUMMARY

A two-year study of avian mortality at the Tawes State Office Building in Annapolis, Maryland, was conducted from the fall of 1977 through the summer of 1979. A total of 200 birds of 52 species were killed by flying against the building. The most common species killed were those that occur in the area for an extended period of time and are most active near the ground. Losses were greatest in fall and summer, instead of the expected fall and spring that proved most important in other studies.

A high frequency of mortality occurred as a result of birds flying into the glass passageways that connect the four buildings in the complex, instead of into the partially reflective glass of the buildings themselves. For this reason, the effectiveness of raptorial silhouettes in reducing avian mortality at these passageways was tested the second year of the study. Use of the silhouettes reduced frequency of mortality at the pasageways by only 7%. This difference was not statistically different ($P > 0.05$) from the frequency observed without silhouettes present. However, for certain species the use of silhouettes may have been effective in reducing mortality.

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BREEDING STATUS OF THE SORA IN MARYLAND

Brooke Meanley

As far as I can ascertain, there are only three records of the breeding of the Sora (*Porzana carolina*) in Maryland. William H. Fisher located a nest with eggs in the Bush River marsh, Harford County, on May 25, 1899. A photograph of the nest appears in A. C. Bent's Life Histories of North American Marsh Birds (Smithsonian Institution, U. S. National Museum Bull. 135, 1926). Stewart and Robbins in Birds of Maryland and the District of Columbia (U. S. Department of Interior, N. Amer. Fauna 62, 1958) also cite this record; and they state that J. Thomas reported that a female with an egg ready to lay was killed by a dog on the Gunpowder River marsh, May 5, 1899. This is a probable fourth nesting record.

In the course of studying rails in a marshy impoundment at the Patuxent Wildlife Research Center near Laurel, I located a nest of hatching young Soras on June 3, 1965; and a flightless juvenile was trapped and banded in the same impoundment on July 15, 1968.

Several birds, and in some cases pairs, have been reported in Dorchester County in June, but there has been no evidence of nesting there.

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SPECIMEN OF THE GANNET (*Morus bassanus*) FROM POINT LOOKOUT

Ernest Willoughby and Thomas Courtney

The Northern Gannet is an oceanic bird normally found over continental shelf waters beyond sight of land except near its nesting islands in the North Atlantic. In the Middle-Atlantic States region it can often be seen from shore between early autumn and spring, and occasionally it enters estuaries (Stone 1937, Schorger 1962, Robbins and Bystrak 1977). We report here a specimen found at Point lookout, a location that is remarkable because of its position far from the ocean and because Robbins and Bystrak (op. cit.) have not listed it as occurring in the Western Shore section of Maryland. [There are a few sight records for Calvert and Anne Arundel Counties, the first of which was 5 birds on the Dec. 21, 1946 Solomons Christmas Bird Count during a rain storm.--Ed.]



Fig. 1. Three views of the study skin of the gannet found at Point Lookout on September 23, 1979. The scale is one meter long.

On September 23, 1979, Courtney found a large, long-winged water bird of a species unknown to him caught against the leader of the pound net he operates at Point Lookout just inside the mouth of the Potomac River. The bird was dead and entangled in several meters of monofilament fishing line. As it was against the north side of the leader, the side facing into the prevailing surface current at this spot, Courtney surmises that the dead or disabled bird had drifted into the net. Courtney notified Willoughby, who salvaged the specimen under authority of Federal and Maryland State migratory bird permits and transported it to St. Mary's College of Maryland. The carcass was kept frozen until July, 1980, when it was made a study skin for the bird collection at St. Mary's College.

This bird proved to be a male in subadult plumage, most likely in its second year as judged from plumage descriptions given by Nelson (1978). Figure 1 shows three views of the specimen. It weighed 2096 g, the skull was fully ossified, the left testis measured 10 x 3 mm, and it had been undergoing a prolonged molt of body, wings and tail. The long duration of the molt is most noticeable in the remiges and their coverts, which range from very worn and faded to new feathers just pushing out of their follicles. The stomach and gut were empty and there was no subcutaneous or visceral fat. The musculature was not emaciated, however, and the uropygial gland appeared to have a normal amount of fatty secretion, so it does not appear that the bird died of starvation alone.

Necropsy revealed no obvious injuries or gross pathology, and an estimated 10 to 15 ml of bloody water in the abdominal and thoracic air sacs, trachea and gullet suggested drowning as the immediate cause of death. As the carcass was quite fresh, there being no decay of internal organs and no odors of putrefaction, it appears that the bird died at or very near the point of recovery.

September 23 was two and one-half weeks following the strongest on-shore winds from Hurricane David (Sept. 6). It is therefore possible (but not at all certain) that this bird may have entered the Chesapeake Bay from the Atlantic as a result of that storm.

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REPORT OF THE STATEWIDE BIRD COUNT, MAY 3, 1980

David W. Holmes

'Twas midnight and the sly May-counter
Was likely to encounter water.
Before you groan about more verse,
Relax! It's stopped.

And so did the wet. The early morning sprinkles and drizzle had ceased by dawn, and the fog and haze lifted through the morning to give us a gorgeous, sunny spring day. The reported temperatures ranged from about 48°F up to about 75°F and the winds were listed as calm to light and variable. Several days of rainy periods preceding Count Day fairly effectively prevented any waves of migration, but the day itself was a nearly perfect day to be out--and the Blue Jays loved it. They flew in a major stream up the Western Shore and Fall Line for most of the day (see totals).

The birders created a moderate wave in 21 counties with numbers of people and party-hours well below record levels, but certainly representing a major effort. No reports were received from Charles or Queen Anne's Counties this year and the Worcester County effort, while appreciated, was a bit spotty. Apparently almost no time was spent in the woods and brush, as eight species of common upland residents (Downy Woodpecker, Am. Goldfinch, etc.) were missed in the state only in Worcester County. There were 23 species recorded in all 21 counties and 17 more in all counties except one. Of the 17, 15 might be the results of incomplete coverage: Mockingbirds are very rare in Garrett County, and the Eastern Phoebe missing from Dorchester County has to be just one of those crazy misses. On the other end of this list, 22 species were listed from single counties and 18 from two counties only.

Party-hours were reported from every county except Talbot this year although the Baltimore list was incomplete. As the bird counts in these two counties are similar to previous years, I have estimated the coverage to be similar to that of last year and have used these estimates for calculating the numbers of birds per party-hour. This year's report, however, can never be used for any study in which absolute statistical accuracy is needed. The reported hours by foot, car, etc., also add up to almost 100 short of the reported hour totals, so this will be a frustrating year for statisticians. The only accurate solution is to throw out the bird lists from all counties with incomplete reports. Perhaps compilers in future years can enforce this procedure now that this warning is appearing in print.

The other bit of exhortation this year again concerns submission of details on unusual sightings. This is becoming increasingly important as more states develop procedures for accepting sight records on official lists and as more Maryland counties compile their own official lists. This compiler would like documentation on any bird that is within 2 or 3

Table 2. Statewide Bird Count, May 3, 1980

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	Harf	CecI	AnAr	Pr.G	Calv	St.M	Kent	Caro	Talb	Dorc	Wico	Somr	Worc	TOTAL
Common Loon	2	6	5	1	7	10	17	42	-	-	78	4	-	15	11	-	1	12	-	-	-	211
Red-throated Loon	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	
Red-necked Grebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2	
Horned Grebe	2	9	-	-	-	3	-	8	-	-	-	-	-	3	-	-	-	11	-	-	-	36
Pied-billed Grebe	1	7	-	-	1	-	-	1	-	-	1	3	-	-	1	1	-	-	-	-	-	16
Double-cr. Cormorant	-	-	-	-	1	1	-	2	-	4	5	-	-	342	2	-	-	76	-	1	9	443
Anhinga	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Great Blue Heron	1	1	4	4	4	3	5	12	5	1	34	47	1	24	37	9	3	30	1	2	1	229
Green Heron	6	16	17	13	29	16	6	24	2	-	28	21	-	1	9	6	1	13	1	2	-	211
Little Blue Heron	*1	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	4
Cattle Egret	-	-	-	-	5	-	1	-	1	21	2	7	1	9	23	-	-	30	2	4	17	123
Great Egret	-	-	-	3	-	-	-	-	-	3	-	1	-	1	1	-	-	35	1	-	6	51
Snowy Egret	-	-	-	-	-	-	-	1	-	-	24	3	-	1	-	-	-	41	-	1	2	73
Louisiana Heron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2
Blk-cr. Night Heron	-	-	-	-	3	1	-	22	-	-	3	2	-	-	-	-	2	4	-	-	-	37
Yellow-cr. Nt. Heron	-	-	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Least Bittern	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	4	-	-	-	6
American Bittern	-	1	-	1	5	1	1	2	-	-	3	5	-	-	1	1	-	2	-	-	-	23
Glossy Ibis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	14
Mute Swan	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-	-	3
Whistling Swan	-	-	-	-	1	-	-	-	-	-	-	-	-	-	16	-	-	1	-	-	-	18
Canada Goose	4	-	78	-	121	17	6	5	526	12	1	133	-	1	337	-	14	69	-	13	3	1340
Snow Goose (Blue)	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	3
Mallard	43	31	152	35	146	34	16	84	11	1	30	79	-	13	70	33	9	42	-	33	6	868
Mallard X Black Duck	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Am. Black Duck	-	3	-	-	7	-	2	6	-	-	12	22	-	2	5	4	-	27	2	1	-	93
Gadwall	6	-	-	-	-	-	-	6	-	-	1	-	-	6	-	2	4	-	-	-	-	25
Common Pintail	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	2	-	-	-	-	5
Green-winged Teal	2	-	-	-	-	1	7	-	-	-	-	10	-	-	4	4	-	4	-	-	-	32
Blue-winged Teal	23	12	6	6	16	-	6	1	5	-	-	17	-	-	2	-	3	30	-	-	-	127
American Wigeon	4	-	-	-	1	1	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	10
Wood Duck	36	41	78	17	102	13	1	28	10	3	18	22	-	2	8	20	5	3	-	-	-	407
Ring-necked Duck	9	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	11
Canvasback	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	1	-	6
Greater Scaup	-	-	-	-	-	-	-	*1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Lesser Scaup	4	-	-	-	-	-	-	3	-	-	4	-	-	-	-	-	-	-	-	-	-	11
Common Goldeneye	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	-	-	-	3
Bufflehead	9	1	-	-	7	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	19
Scoter sp.	-	-	-	-	-	-	-	-	-	-	115	-	-	-	-	-	-	1	-	-	-	116

Table 2 (cont.). Statewide Bird Count, May 3, 1980

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	Harf	Cecil	AnAr	Pr.G	Calv	St.M	Kent	Caro	Talb	Dorc	Wico	Somr	Worc	TOTAL
Ruddy Duck	-	-	2	-	-	4	-	88	-	-	-	8	-	-	2	-	-	-	-	-	5	109
Hooded Merganser	1	1	-	-	-	-	-	-	-	-	-	4	-	-	1	-	-	-	-	-	-	7
Common Merganser	4	5	-	-	1	7	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	56
Red-br. Merganser	1	1	17	-	1	1	-	1	-	-	-	7	-	-	1	-	-	26	-	-	-	18
Turkey Vulture	8	36	76	36	102	64	1	42	9	6	27	29	4	10	80	280	39	41	68	42	25	1025
Black Vulture	-	-	37	20	3	17	1	10	-	-	-	7	-	-	3	5	4	3	-	1	-	111
Sharp-shinned Hawk	3	1	5	1	15	6	-	13	3	-	31	3	17	-	1	1	-	-	-	-	-	100
Cooper's Hawk	1	3	2	1	2	-	-	1	-	-	-	2	7	-	-	-	-	-	-	-	-	19
Red-tailed Hawk	1	6	12	5	24	14	1	5	6	3	9	15	1	1	7	13	2	6	7	-	2	140
Red-shoulder. Hawk	-	2	4	4	28	20	-	9	1	-	16	18	1	-	2	2	-	2	4	-	-	113
Broad-winged Hawk	4	10	12	2	19	9	-	10	-	-	2	3	-	-	4	-	-	2	-	-	-	77
Rough-legged Hawk	-	-	-	-	*1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Bald Eagle	-	1	-	-	-	-	-	-	-	1	-	-	1	4	-	2	8	-	1	-	-	18
Northern Harrier	-	-	-	2	3	1	-	-	-	2	-	-	-	2	2	-	5	-	-	-	-	17
Osprey	2	-	4	6	5	2	1	7	5	-	21	14	1	21	16	6	4	30	5	5	2	157
Peregrine Falcon	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Merlin	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2
American Kestrel	8	4	5	6	13	9	-	9	2	3	7	15	2	3	3	5	-	-	-	-	-	94
Ruffed Grouse	36	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43
Bobwhite	1	5	26	4	29	21	-	33	10	3	23	28	7	6	9	61	26	30	14	14	3	353
Ring-neck. Pheasant	-	2	51	43	7	20	11	50	3	-	1	-	-	1	-	-	-	-	-	-	-	191
Wild Turkey	10	18	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31
King Rail	-	-	-	-	-	-	-	-	-	-	1	-	-	-	7	1	-	5	-	-	-	14
Virginia Rail	-	-	-	-	-	-	-	-	-	-	17	1	-	-	11	1	-	34	-	-	-	64
Sora	-	-	-	-	-	-	-	-	-	-	4	-	-	-	2	-	-	11	-	-	-	17
Black Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2
Common Gallinule	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	6	-	-	-	8
American Coot	54	5	4	2	2	-	2	4	-	-	2	4	-	-	7	-	-	-	2	-	-	88
Am. Oystercatcher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2
Semipalmated Plover	-	-	-	-	-	-	-	-	-	-	-	2	-	-	17	-	-	10	-	-	-	29
Killdeer	54	35	29	15	6	8	3	27	2	5	2	24	-	6	9	10	2	6	2	2	5	252
Black-belly Plover	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	9	-	-	-	-	11
American Woodcock	8	5	5	2	4	3	-	10	-	4	-	4	-	-	27	9	-	16	-	-	-	97
Common Snipe	10	-	2	2	1	2	-	-	1	-	-	21	-	-	-	-	3	1	-	-	-	43
Upland Sandpiper	1	-	-	3	-	-	-	1	-	-	1	-	-	-	-	1	-	-	-	-	-	7
Spotted Sandpiper	29	34	42	30	40	39	6	56	3	-	18	150	-	2	8	25	41	11	4	-	1	539
Solitary Sandpiper	8	21	8	52	31	8	2	29	9	-	5	40	1	-	8	8	1	12	5	-	-	248
Willet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	1	-	2	39
Greater Yellowlegs	-	3	5	14	1	-	-	8	9	-	-	29	-	-	20	34	64	45	15	8	1	256

Table 2 (cont.). Statewide Bird Count, May 3, 1980

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	Harf	Cecil	AnAr	Pr.G.	Calv	St.M	Kent	Caro	Talb	Dorc	Wico	Somr	Worc	TOTAL	
Lesser Yellowlegs	27	12	6	10	30	5	-	18	13	-	1	18	-	-	8	-	68	4	2	-	-	222	
Yellowlegs sp.	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	
Pectoral Sandpiper	-	1	-	-	-	-	-	-	1	-	-	6	-	-	3	1	-	1	-	-	-	13	
White-rumped Sandp.	*3	-	*1	-	-	-	-	-	-	-	-	4	-	-	3	-	-	-	-	-	-	11	
Least Sandpiper	1	17	4	8	1	-	-	39	1	-	5	3	-	12	237	3	7	25	3	-	-	366	
Dunlin	-	-	-	1	-	-	-	-	-	-	-	-	-	-	12	-	-	88	-	-	-	101	
Short-b. Dowitcher	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	8	
Semipalm. Sandpiper	-	-	-	-	-	-	-	3	-	-	-	9	-	30	7	13	2	10	-	-	-	74	
Western Sandpiper	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	5	
Sanderling	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2	
Glaucous Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*1	-	1	
Gr. Blk-back. Gull	-	-	-	-	-	-	-	101	1	-	13	-	-	13	11	-	-	3	5	-	-	147	
Herring Gull	11	15	1	-	5	1	-	93	-	-	875	37	-	73	212	-	1	275	31	-	-	1630	
Ring-billed Gull	132	15	15	-	71	50	-	1810	52	3	3456	1561	12	190	979	60	86	12	66	102	-	8672	
Laughing Gull	-	-	-	-	-	2	-	-	94	-	2	2893	-	8	202	142	743	133	110	167	197	25	4718
Bonaparte's Gull	27	-	3	-	14	-	-	23	-	2	2	5	-	-	-	-	1	10	-	-	-	87	
Forster's Tern	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	-	15	1	-	-	19	
Common Tern	-	-	-	-	-	-	-	-	1	-	-	-	-	17	-	-	-	1	-	-	-	24	
Little Tern	-	-	-	-	-	-	-	-	10	-	-	-	-	3	-	-	2	18	-	-	-	33	
Royal Tern	-	-	-	-	-	-	-	-	-	-	50	-	-	2	-	-	-	57	1	-	-	110	
Caspian Tern	-	-	-	-	-	-	-	61	-	-	13	-	-	-	-	-	-	-	-	-	-	74	
Black Skimmer	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	20	
Rock Dove	4	97	102	94	322	318	6	1307	10	-	33	472	-	3	23	57	5	3	4	6	7	2873	
Mourning Dove	74	44	234	122	446	227	12	336	39	7	60	194	12	25	79	129	26	15	19	16	1	2117	
Ringed Turtle Dove	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Yellow-bill. Cuckoo	-	-	-	1	15	6	-	3	-	-	3	10	-	1	2	8	2	7	4	-	2	64	
Barn Owl	2	-	-	-	-	-	-	5	-	-	2	1	-	-	-	3	-	1	-	-	-	14	
Screech Owl	5	-	3	3	-	-	-	-	-	-	2	-	-	-	12	3	-	6	-	-	-	34	
Great Horned Owl	1	1	3	1	-	1	-	-	-	-	3	1	-	-	10	3	-	2	-	-	-	26	
Barred Owl	3	1	2	1	22	8	-	1	1	1	6	19	1	-	5	13	-	3	-	-	-	87	
Chuck-will's-widow	-	-	-	-	-	-	-	1	-	-	3	1	-	-	3	29	1	-	25	-	-	53	
Whip-poor-will	4	6	2	1	24	6	-	25	-	21	1	43	-	1	27	21	-	14	-	-	-	196	
Common Nighthawk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	7	
Chimney Swift	41	88	307	192	134	30	3	227	10	15	141	53	27	15	24	108	18	27	.16	5	22	1503	
Ruby-thr. Hummingbd	-	5	2	1	14	2	-	6	-	-	3	7	1	-	10	14	2	2	1	1	-	71	
Belted Kingfisher	4	13	19	13	19	10	1	12	-	-	9	8	-	1	6	8	-	-	2	-	-	125	
Common Flicker	31	89	76	39	103	48	11	60	15	1	34	29	-	2	27	23	17	14	9	8	2	638	
Pileated Woodpkr	2	13	21	5	40	8	-	2	-	-	3	10	-	-	-	3	2	5	3	-	-	117	
Red-bellied Woodpkr	2	34	73	26	247	101	5	62	12	13	45	51	4	8	24	60	34	11	9	2	-	823	

Table 2 (cont.). Statewide Bird Count, May 3, 1980

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	Harf	Cecil	AnAr	Pr.G	Calv	St.M	Kenc	Caro	Talb	Dorc	Wico	Somr	Worc	TOTAL	
Red-headed Woodpkr	6	-	7	3	3	-	-	1	-	-	-	2	-	-	-	-	-	1	1	-	-	24	
Yellow-b. Sapsucker	1	3	1	-	3	-	1	3	-	-	-	-	-	1	-	-	-	-	-	-	-	13	
Hairy Woodpecker	7	8	35	4	18	11	-	5	1	-	9	4	-	1	5	12	-	-	-	1	-	121	
Downy Woodpecker	35	60	77	23	120	36	4	43	3	5	39	37	2	3	16	32	5	3	8	2	-	553	
Eastern Kingbird	3	3	38	23	64	41	2	29	4	2	37	47	4	1	35	25	2	19	13	1	-	393	
Gt. Crested Flycat.	-	17	11	3	43	4	1	7	-	-	12	9	-	4	9	28	47	15	13	1	-	224	
Eastern Phoebe	19	33	43	22	62	21	4	27	1	3	3	21	2	1	10	30	9	-	3	2	3	319	
Acadian Flycatcher	-	1	-	-	14	8	-	1	-	-	-	3	-	2	-	9	4	1	1	1	-	45	
Alder Flycatcher	-	-	-	-	-	1	-	-	-	-	-	-	-	*1	-	-	-	-	-	-	-	2	
Least Flycatcher	-	1	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
Eastern Pewee	4	-	2	-	7	2	-	2	-	1	-	-	-	3	2	4	1	2	1	3	-	34	
Olive-sided Fly.	-	-	-	-	*1	-	-	-	-	-	-	-	-	*1	-	-	-	-	-	-	-	2	
Horned Lark	8	-	7	1	1	-	-	12	-	-	-	8	-	3	8	18	-	3	-	-	-	69	
Tree Swallow	77	18	173	4	67	15	10	80	3	2	760	121	4	3	109	35	9	66	4	2	-	1562	
Bank Swallow	5	-	6	3	7	-	-	55	24	-	353	44	1	2	64	*4	-	2	-	-	-	570	
Rough-wg. Swallow	7	11	125	29	46	11	32	29	-	2	4	8	1	2	10	10	-	-	2	-	-	329	
Barn Swallow	144	40	179	118	330	229	15	243	33	19	458	307	36	75	211	202	96	100	70	80	30	3015	
Cliff Swallow	103	10	5	-	12	6	-	20	-	-	-	12	-	-	-	-	-	1	-	-	-	169	
Purple Martin	72	1	289	16	59	12	-	82	8	2	41	46	67	38	202	154	2	29	66	12	5	1203	
Blue Jay	217	90	183	339	2657	1060	127	2132	287	56	6874	695	1573	37	359	179	52	44	39	12	4	-	17016
Northern Raven	2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	
American Crow	236	145	317	375	625	226	32	367	23	3	157	192	6	50	50	243	20	30	23	21	1	-	3142
Fish Crow	-	-	18	21	89	8	3	37	14	3	18	34	3	68	13	17	45	10	2	-	-	403	
Blk-cap. Chickadee	92	36	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207	
Carolina Chickadee	-	-	33	35	307	90	10	133	16	12	85	101	4	14	58	63	24	16	23	9	-	1033	
Tufted Titmouse	21	65	137	55	309	112	4	111	8	11	68	84	7	25	35	71	25	13	30	8	1	-	1200
White-br. Nuthatch	40	17	11	5	35	8	-	8	-	-	-	2	-	1	-	2	1	-	-	-	-	130	
Red-breast. Nuthatch	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	3	
Brown-headed Nut.	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	5	-	-	-	8	
Brown Creeper	7	-	3	2	4	-	-	-	-	-	-	-	-	1	-	1	1	-	-	-	-	19	
House Wren	14	30	111	89	370	101	10	80	12	2	30	32	1	1	39	11	1	12	8	5	-	959	
Winter Wren	2	-	-	-	2	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	7	
Carolina Wren	1	7	47	18	98	25	2	38	4	2	44	27	4	16	16	32	18	10	4	5	1	419	
Marsh Wren	-	-	-	-	-	-	-	3	2	-	12	10	-	1	6	-	-	35	3	2	-	74	
Sedge Wren	-	-	-	-	-	-	-	-	-	-	-	1	-	-	6	-	-	-	-	-	-	7	
Northern Mockingbird	-	35	66	39	174	92	4	67	26	9	66	93	5	21	72	96	42	7	19	19	2	-	954
Gray Catbird	4	20	67	51	353	228	24	147	20	2	74	125	11	11	61	51	5	11	5	2	1	-	487
Brown Thrasher	31	29	54	23	68	29	9	26	11	5	34	23	4	6	43	66	14	4	21	14	4	-	1304
American Robin	380	393	461	278	484	220	26	304	72	13	254	204	26	33	265	256	52	31	74	31	17	-	3894

Table 2 (cont.). Statewide Bird Count, May 3, 1980

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	HarF	CecI	AnAr	Pr.G	Calv	St.M	Kent	Caro	Talb	Dorc	Wico	Somr	Worc	TOTAL
Wood Thrush	12	30	48	23	210	93	7	91	16	30	88	53	7	11	74	106	48	13	15	12	-	987
Hermit Thrush	3	-	1	5	17	4	-	6	2	-	2	2	-	-	1	-	-	-	-	-	43	
Swainson's Thrush	2	-	-	-	11	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	17	
Gray-cheeked Thrush	-	-	-	-	*1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Veery	3	2	-	-	22	11	-	9	1	1	4	5	-	-	1	-	-	-	-	-	59	
Eastern Bluebird	12	19	127	33	68	44	8	12	9	-	5	57	-	4	8	20	-	1	-	2	1	430
Blue-gray Gnatcat.	52	106	207	19	610	97	8	116	8	11	69	35	-	3	27	21	8	9	2	-	-	1408
Golden-cr. Kinglet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2	
Ruby-cr. Kinglet	36	15	31	15	66	41	1	35	2	2	32	18	1	1	3	2	-	3	-	-	-	304
Water Pipit	1	-	2	-	1	-	-	18	-	-	-	-	-	-	16	-	1	-	-	-	39	
Cedar Waxwing	-	10	51	-	107	-	-	13	-	-	6	14	30	-	10	7	-	-	-	-	-	248
Loggerhead Shrike	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Starling	119	288	594	310	1068	395	19	796	85	20	564	594	15	80	366	713	263	46	305	95	39	6774
White-eyed Vireo	2	7	7	6	122	97	6	92	13	6	84	63	4	12	31	32	41	21	43	22	2	713
Yellow-thr. Vireo	-	7	16	-	50	18	2	12	-	2	6	7	-	1	8	3	-	-	3	-	135	
Solitary Vireo	6	1	6	-	15	9	-	-	-	3	5	-	-	-	8	-	-	-	-	-	-	53
Red-eyed Vireo	5	8	29	9	267	85	3	104	21	14	202	144	8	32	76	82	28	26	20	25	-	1188
Philadelphia Vireo	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	3
Warbling Vireo	-	-	31	3	52	3	-	1	-	-	-	-	-	-	3	1	-	-	1	-	-	95
Blk-&-white Warbler	7	1	11	4	63	53	4	59	7	20	21	55	-	15	15	7	5	6	8	1	-	362
Prothonotary Warbler	1	1	12	,2	71	-	-	-	-	1	3	5	-	-	11	22	2	6	5	10	-	152
Worm-eating Warbler	-	1	9	-	18	9	-	10	-	1	5	-	-	-	8	2	9	4	3	-	-	79
Golden-wing. Warbler	-	4	6	-	7	4	-	2	-	-	-	1	-	-	3	-	1	-	-	-	-	28
Brewster's hybrid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Lawrence's hybrid	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Blue-winged Warbler	-	1	6	-	53	25	1	28	1	1	22	14	-	1	11	1	2	1	3	-	-	171
Tennessee Warbler	-	-	-	-	8	-	-	1	1	-	2	1	-	-	1	1	-	-	-	-	-	15
Nashville Warbler	3	2	3	1	8	2	-	-	-	-	2	2	-	-	1	-	-	-	-	-	-	24
No. Parula Warbler	-	21	21	1	240	57	5	43	3	8	49	59	1	16	6	7	4	4	2	-	-	547
Yellow Warbler	24	62	65	11	48	47	-	46	29	3	17	51	-	2	138	8	3	19	11	2	-	586
Magnolia Warbler	1	2	-	-	10	2	-	-	-	1	-	-	-	-	3	-	-	-	-	-	-	19
Cape May Warbler	-	-	-	-	15	1	-	1	-	1	-	4	-	-	-	-	-	-	-	-	-	23
Blk-thr. Blue Warb.	4	-	2	2	33	7	-	8	1	-	12	6	1	3	3	-	2	-	-	-	-	84
Yellow-rumped Warb.	68	36	108	91	927	216	7	347	41	15	167	476	10	27	320	44	32	23	31	-	-	2986
Blk-thr. Green Warb.	42	4	6	1	33	4	-	3	-	-	5	5	-	3	8	2	-	-	-	-	-	116
Cerulean Warbler	-	1	70	-	50	3	1	6	-	-	-	5	-	2	3	-	1	-	-	-	-	142
Blackburnian Warb.	2	1	1	-	2	-	-	-	-	-	1	1	-	3	1	-	-	-	-	-	-	12
Yellow-thrtd. Warb.	-	1	34	-	44	4	-	3	1	-	1	-	-	-	1	1	2	2	1	-	-	95
Chestnut-sided Warb.	5	-	2	-	10	-	-	2	-	-	-	4	-	-	10	-	-	-	-	-	-	33

Table 2 (cont.). Statewide Bird Count, May 3, 1980

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	Harf	Cecl	AnAr	Pr.G	Calv	St.M	Kent	Caro	Talb	Dorc	Wico	Somr	Worc	TOTAL
Bay-breasted Warb.	1	-	-	-	2	-	-	3	-	-	3	-	-	1	-	-	-	-	-	-	-	10
Blackpoll Warbler	-	-	-	-	3	-	-	-	-	-	1	-	-	3	-	-	-	-	-	-	-	7
Pine Warbler	1	2	4	-	-	-	-	-	-	3	16	25	1	18	7	12	4	38	26	-	-	157
Prairie Warbler	6	9	17	-	57	56	4	31	5	4	40	33	1	15	21	11	1	8	11	14	-	342
Palm Warbler	2	3	-	1	3	2	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	14
Ovenbird	2	1	12	4	70	54	3	37	-	38	55	61	6	9	19	40	28	26	40	17	-	522
No. Waterthrush	-	1	2	-	15	4	1	13	3	2	8	3	-	-	2	1	-	-	1	-	-	56
La. Waterthrush	101	24	41	5	41	11	2	18	3	3	4	5	1	2	3	4	2	-	2	-	-	272
Kentucky Warbler	1	-	1	-	16	17	-	11	1	2	4	1	1	1	9	7	1	1	1	-	-	75
Mourning Warbler	-	-	-	-	-	-	-	-	-	-	-	*1	-	-	-	-	-	-	-	-	-	1
Common Yellowthroat	7	22	42	49	378	265	31	198	50	21	149	108	15	8	178	70	28	88	44	32	2	1785
Yellow-br. Chat	-	3	4	-	13	23	-	5	2	-	9	4	1	-	7	12	1	7	-	3	-	94
Hooded Warbler	-	1	1	-	5	22	-	14	-	2	47	19	5	2	-	-	2	-	5	-	-	125
Wilson's Warbler	-	-	-	-	2	-	-	-	-	-	2	-	-	-	3	-	-	-	-	-	-	7
Canada Warbler	-	1	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	6
American Redstart	3	4	56	1	87	59	1	28	3	1	25	76	1	5	11	1	4	-	-	14	-	380
House Sparrow	145	135	543	284	255	149	10	353	32	13	79	192	30	58	125	223	96	15	71	40	31	2879
Bobolink	9	-	-	-	2	1	-	-	-	-	203	5	100	-	-	-	-	4	-	-	-	324
Eastern Meadowlark	141	43	91	90	58	51	8	21	19	1	22	42	8	17	22	13	14	22	-	8	1	692
Red-wing. Blackbird	444	181	664	236	750	315	62	578	204	118	1338	645	655	56	611	496	128	700	99	63	10	8353
Orchard Oriole	-	3	17	1	23	3	-	2	1	1	18	5	-	2	19	22	3	16	15	1	1	153
Northern Oriole	1	13	100	12	51	10	6	21	2	2	19	7	2	1	12	25	-	1	-	-	-	285
Rusty Blackbird	1	10	3	-	7	-	-	2	-	-	16	-	-	3	-	-	1	-	-	-	-	43
Boat-tailed Grackle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	37	2	47	
Common Grackle	372	499	1215	466	1134	269	18	512	77	69	474	260	55	227	354	943	66	600	223	62	60	7955
Brown-head. Cowbird	66	100	247	49	361	87	29	127	10	5	61	34	475	18	214	97	27	44	23	15	3	2092
Scarlet Tanager	1	5	16	5	57	29	-	16	1	8	37	37	3	4	13	24	4	2	10	7	-	279
Summer Tanager	-	-	-	-	4	-	-	-	-	-	2	2	-	1	-	12	2	5	-	-	-	28
Northern Cardinal	64	184	283	148	743	327	26	351	52	20	239	207	18	23	191	185	46	20	46	32	3	3208
Rose-br. Grosbeak	2	-	3	-	7	5	1	7	3	1	2	4	-	-	2	1	-	-	-	-	-	38
Blue Grosbeak	-	-	1	-	1	-	-	-	-	-	5	2	-	3	11	16	1	2	18	-	3	63
Indigo Bunting	-	2	5	2	59	9	3	10	-	-	12	21	-	16	7	2	2	1	4	14	-	169
Dickcissel	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Evening Grosbeak	26	37	6	1	3	1	-	1	-	-	1	1	-	-	-	8	-	-	5	-	-	90
Purple Finch	37	31	113	35	68	15	-	53	1	-	-	6	-	2	3	2	-	-	-	-	-	366
House Finch	10	73	141	12	16	3	1	52	3	-	7	21	-	-	2	1	-	-	-	-	-	342
American Goldfinch	373	427	694	194	965	307	13	510	43	10	147	129	3	9	119	50	82	2	7	1	-	4085
Rufous-sided Towhee	100	58	86	61	281	142	25	164	42	22	85	76	17	10	60	65	21	25	16	9	3	1368
Savannah Sparrow	5	11	25	2	44	8	-	41	-	-	37	16	8	4	4	1	2	5	-	-	-	213

Table 2 (cont.). Statewide Bird Count, May 3, 1980

Species	Garr	Alle	Wash	Fred	Mont	Howa	Carr	Balt	Harf	Cecil	AnAr	Pr.G	Calv	St.M	Kent	Caro	Talb	Dord	Wico	Somr	Worc	TOTAL
Grasshopper Sparrow	1	3	9	6	15	13	-	8	-	-	3	30	-	6	2	-	3	3	-	2	-	104
Henslow's Sparrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	4	
Sharp-tailed Spar.	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	
Seaside Sparrow	-	-	-	-	-	-	-	3	-	-	17	-	-	-	2	-	-	75	4	-	101	
Vesper Sparrow	2	-	18	4	4	2	-	6	-	-	2	-	-	2	7	-	-	-	-	-	47	
Northern Junco	6	1	8	11	4	-	-	1	2	-	7	1	1	-	-	5	-	-	-	-	47	
Chipping Sparrow	211	121	122	32	126	69	2	111	13	11	54	61	-	25	63	115	25	13	23	30	-	1227
Field Sparrow	102	69	121	38	259	86	20	45	7	6	30	48	13	12	41	44	3	12	6	2	-	964
White-crowned Spar.	2	1	44	1	2	3	-	1	-	-	1	2	1	-	12	2	-	-	-	-	-	72
White-throated Spar.	44	162	219	280	998	631	61	461	96	11	274	232	41	4	73	138	77	7	42	3	2	3856
Lincoln's Sparrow	-	-	-	-	-	-	-	-	-	-	-	*3	-	-	-	-	-	-	-	-	-	3
Swamp Sparrow	64	7	4	4	20	6	-	54	1	-	4	15	-	-	8	-	1	3	2	1	-	194
Song Sparrow	243	163	144	108	283	126	29	198	22	14	73	125	16	9	40	10	13	11	1	10	1	1639
Total Species	139	133	146	117	169	135	80	165	96	82	153	162	75	120	169	127	106	149	97	78	55	243
Total Individuals	5316	10790		20360			882	2290		22631			3429	7838		2251			2108	419		137159
Party-hours: foot	69	56½	100	33	186	83	9	?	?	2	?	81	8	2	12	68	?	4½	?	?	2	720+
car	24	9½	20	10	36	12	1	?	?	7	?	14	0	10	35	33	?	17	?	?	2	230+
boat	2½	0	0	0	0	0	?	?	?	0	0	2	0	0	0	2	?	0	0	0	0	
other	4	0	0	0	0	1	0	?	?	0	0	2	0	0	0	0	?	0	0	0	7	
total	99½	66	120	43	222	96	10	95	16	9	51½	99	8	12	47	103	25	21½	17	10	4	1175
Party-miles: foot	60	32	125	20	140	64	4+	42	5	1	27	65	6	3	20	32	10	2	2	4	1+	665
car	376	112	400	220	277½	165	?	165	?	29	95	213	0	189	197	299	?	190	128	50	40	3146+
boat	5	0	0	0	0	0	?	?	?	0	0	6	0	0	0	2	?	0	0	0	0	
other	4	0	0	0	0	2	0	0	?	?	0	5	0	0	0	0	?	0	0	0	11	
total	445	144	525	240	417½	231	?	207	?	30	122	289	6	192	217	333	?	192	130	54	41	3815+
Starting Time	0500	0530		0450			0500	0400	0300	0001	0600	0430	0005	0000								0001
Ending Time	2130	2100		2230			1500	1300	2100	2100	1400	1630	2300	2130								2300
Total Observers	25+	25	24	19	69	27	6	28	4	2	17	30	1	2	14	37	5	3	6	3	2	349
Total Parties	?	?	15	4	?	?	?	15	2	1	?	21	1	1	5	?	?	1	?	?	?	?

*These reports needed confirming details but were submitted without them. Without substantiation, they should not be considered for season reports, etc. The scaup, gull, and Alder Flycatcher are often difficult identification problems. The others are possible but questionable on the basis of location and/or expected dates. Very special thanks to my father, Carl S. Holmes, who did much of the work on this table.

days of record arrival or departure dates as well. These can easily be checked in the Robbins and Bystrak "Field List of the Birds of Maryland," 1977. Compilers from only Frederick, Montgomery, Prince George's, and Dorchester Counties even indicated that some birds were unusual. Any comments are greatly welcomed even if they do not get directly quoted. For instance, this compiler was skeptical of the number of Anne Arundel County Royal Terns, but Armistead's offhand comment that he could not explain why Royal Terns had made such a good showing in Talbot and Dorchester Counties this spring really eased the mind. I wish someone had similarly explained the number of Laughing Gulls in Prince George's County (zero).

The most amazing bird on this May Count has to be the Anhinga (the first for the Count) on the C & O Canal in Montgomery County; it had been reported the previous week at a nearby location. The Montgomery County Olive-sided Flycatcher was carefully documented to the local compiler. The Prince George's Peregrine Falcon was seen not far from the hacking platform at Merkle Wildlife Refuge and the Montgomery Rough-legged Hawk was at least noted as unusual. However, details were definitely desirable, as this bird broke the state departure record by a week. It was simply not a count full of rarities; the spring was a bit late, the winds were wrong, but the day was delightful enough so the life to the spirit was real--rarities or not.

This year's flight of fancy for the compiler involved curiosity about the most common species. The top 15 birds were listed for each of the last 15 May Counts. Total individuals and birds per party-hour were figured for each species in each year and combined into the 15-year totals. Then, the birds per party-hour figures were averaged for each 5-year group of counts (1966-70, 1971-75, 1976-80). Even when one considers the instability of coverage, changing dates, and weather as variables, the averages can suggest some fascinating trends.

As you see in Table 2, the native blackbirds (grackles, Red-wings, and cowbirds) decreased, the real drop coming during the unusually cold winters between 1971 and 1973; and populations seem to be holding with only a hint of upward movement in the last two or three years. House Sparrows also dropped significantly between 1971 and 1972 and seem to be continuing a slow decline. Hadn't you noticed? Or do you think these birds are best ignored? Breeding Bird Survey data confirm the decline in the northeastern states (Virginia to Maine) and strongly suggest it in Maryland. Now, if someone will discover the reason for the failure to recover after 1973...

The saga of the gulls is equally fascinating. In 1976 (in the rain), there seemed to be an explosion. First thoughts were that the sudden blitzing of eastern Baltimore County was responsible, but that was not begun until 1977 and the explosion was at least bay-wide. But, numbers have remained high. Is it increased interest, or increasing gulls?

Another species showing a remarkably steady increase is American Crow. This is also confirmed by Breeding Bird Survey data, as is the increase of Mourning Doves.

Table 2. Trends for species that have been in the top 15

Species	Total Birds 1966-80	Birds per Party-hr* 1966-80	No. Years in Top 15 1966-80	Mean Birds per Party-hr		
				1966-70	1971-75	1976-80
Common Grackle	173,821	10.89	15	13.99	11.27	9.46
Eur. Starling	126,947	7.95	15	7.67	8.25	8.09
Red-wing Blkbird	124,742	7.82	15	9.75	7.31	7.33
Blue Jay	108,398	6.79	15	5.67	8.58	5.05
American Robin	63,609	3.99	15	3.34	4.51	4.04
Am. Goldfinch	62,449	3.91	15	4.04	3.89	3.98
Barn Swallow	62,423	3.91	15	3.48	3.62	4.52
Ring-billed Gull	59,211	3.71	12	1.13	1.84	7.71
House Sparrow	53,375	3.34	14	4.47	3.38	2.72
Yellow-r. Warbler	47,969	3.01	9	1.20	1.83	5.09
Northern Cardinal	44,210	2.77	14	3.03	3.15	2.74
White-thr. Spar.	41,291	2.59	7	1.14	2.77	3.33
Laughing Gull	37,729	2.36	8	1.55	1.15	4.42
American Crow	33,349	2.09	11	1.55	2.01	2.58
Tree Swallow	29,017	1.82	6	1.24	1.72	2.21
Brown-hd Cowbird	27,746	1.74	7 (all pre '75)	1.82	1.95	1.50
Canada Goose	27,566	1.73	4	1.80	2.62	0.96
Mourning Dove	25,490	1.60	2	1.28	1.60	1.80
Herring Gull	24,470	1.53	4	0.95	1.27	2.24
Rufous-s. Towhee	22,880	1.43	5 (all pre '73)	1.59	1.39	1.37
Chimney Swift	21,855	1.37	6 (pre '71, '79)	1.59	1.08	1.64
No. Mockingbird	17,327	1.09	4 (all pre '71)	1.50	1.12	.80
Bobolink	17,120	1.07	3 (see text)	0.24	0.12	2.54
Gray Catbird	16,827	1.05	1 (1966)	1.24	0.84	1.11
Dunlin	5,922	0.37	1 (see text)	0.30	0.50	0.36
Rock Dove			4 (see text)	--	--	3.52

*Total party-hours, 1966-80, = 15,960

For the true migrants, this chart is just an exercise; it has no significance. Too much depends on the date and weather conditions. We seem to average a real Blue Jay day about every four years. The 1971-75 count group hit two--so that average is much higher than the other sets, which had one each. The earlier the count, the higher the robin totals (coincidence?); and while White-throated Sparrow totals are similar, they are not so nicely consistent. Bobolinks were IN in 1977, 78, and 79 and insignificant in all other years. American Goldfinch averages are amazingly similar, especially for a bird in migration at this time of year. Rock Doves were not counted before 1975 and Dunlin made the list on the basis of a single large flock in Worcester County in 1973.

One interesting trend is the increase in numbers of birds per party-hour needed to make the list of the top 15. In 1966-69, the cut-off point was about 1.25 birds per party-hour. This year and last, the cut-off points have been about 2.50. This may say more about efficiency of coverage than it says about numbers of birds; or it may say a good deal about species response to human influenced environmental changes (gull

totals?); or yet again, it may reflect a proportional decrease of time spent in the woods and suburbs--observers going where the birds are rather than where they would like the birds to be.

As always, the numbers simply raise more questions. And isn't this a lot of the fun of a Count, to see what sort of screwy thing you will discover next? And your curiosity will bring you out on the next count, and the next, and ...

SUMMARY OF COVERAGE

GARRETT (Garr) 25+ observers. 5:00 a.m. to 9:30 p.m.
Al Bourgeois, David, Hillel and Seth Brandes, Drew Ferrier, Charlotte and Dan Folk, Sheila Hughes, Vinnedge Lawrence and students from Washington and Jefferson College in Washington, Pa., Grace Lichty, Bill Pope, Fran Pope (compiler), Barbara Schrock, Jay Sheppard, Barb Swiger, Diane and Fred Thayer, Sallie Thayer, Becky, Daisy, John and Sam Yoder, Bradley and Gary Yoder, Marvin Yoder.

ALLEGANY (Alle) 25 observers. 5:30 a.m. to 9:00 p.m.
Tod Davis, Bill Devlin, David Forney, Florence Giffin, Kendrick Hodgdon (compiler), Jon Jansen, William, Mark & Dorothea Malec, Martha Meek, Mr. & Mrs. Lamar Minnick, Paul Nazelrod, James Paulus, Debra Pence, John Pfeiffer & son, Mr. & Mrs. Reikie, Paul and Ann Smith, Mary Twigg, James Wilkinson, John Willetts, Harriet Williams.

WASHINGTON (Wash) 24 observers.
Laura Arant Ted Banvard, Genevieve Beck, Dan Boone, Cindy Bunnell, Mary & Ross Corderman, Frances & Don Cutchall, Barbara Dowell, Leontine & Truman Doyle, Chuck Dupree, Beulah Green, Debbie Landis, Cam & Norma Lewis, Marilyn Mause, Jean Neely, Nancy Pierce, Dorothy Ridenour, Doris Ruthrauth, Frank Sturges, Bertie Thurmond.

FREDERICK (Fred) 19 observers.
Melvin Bennett, Serene Collmus, Edward and Sonya Dapper, John Helm, Howard and Phyllis Hodge, Kenneth and Carolyn Maize, Marilyn Mause, William Meredith, Charles Mullican (compiler), John and Ruth Richards, William Shirey, Linda Smith, John Thrasher, David Wallace, Michael Welch.

MONTGOMERY (Mont) 69 observers. 4:50 a.m. to 10:30 p.m.
Shirley Bean, Louise Berry, Chip Bonde, Larry Bonham, Joy and Mike Bowen, Rich Bray (compiler), Bob and Ellen Caswell, Dick and Marjorie Cleveland, Paris and Alice Coleman, David Czaplak, Don and Margaret Donald, Paul DuMont, Dan Eberly, Bill and Marie Elliott, Heather, Robert and Tony Futcher, Gregory Gough, Delores Grant, Bob Hahn, Even and Ives Hannay, Les Holtschlag, Duane Hope, Glory Houck, Heidi Hughes, Vince Jones, Katherine Jones, Ruth Klein, Nancy and Stuart MacClin-tock, Louise Marsh, David Mehlman, Helen Meleney, Jean Mielczarek, Ed Mirsky, Ann Mitchell, Phyllis Morrow, Gary Nelson, Lucy Perron, Ella Pfeifer, Aline Pinkard, Marie Plant, Ray Prybis, Irene Ritch, Cheryl Roslund, Leslie Roslund, Nicholas Root, Nich Schliapin, Margaret Sickels, Wayne Sieck, Dick Thorington, Tom Valega, Winnie Walker-Jones, David and Diane Weber, Don Weber, Bill Wendell, John Weske, Claudia Wilds, Frank Witebsky, Paul Woodward.

HOWARD (Howa) 27 observers.
Joe Byrnes, John and Eileen Clegg, John Grabowski, David Holmes, Alice Kretz, Terry Landon, Chris Ludwig, Dennis and Ginny Matthias, Mike and Grazina McClure, Linda McDaniel, Nancy Mohr, Rosamond Munro, Nancy Powell, Dorothy Rauth, Fred and Nan Rhinelander, Chandler and Eleanor Robbins, Stephen Simon, Jo Solem, Earl Strain, Mark Wallace, Jack Whyte, Paul Zucker (compiler).

CARROLL (Carr) 6 observers.
Harold Burkett, David Holmes, Bertie MacGregor, Jerry Newton, Patsy Perlman, Margaret Stevenson. Bill Ellis, compiler.

BALTIMORE (Balt) 28 observers.

Mike Beyer, Warren Bielenberg, Peggy Bohanan, Ed Boyd, Martin Brazeau, Chris Cheney, John Cullom, Bob Dixon, JoAnn Dreyer, Martha Farmer, Steve Hardiman, Scott Hartlaub, Betty Iber, Bob Jarboe, Hank Kaestner, Peter Kaestner, Cindy Lane, Bob Lyon, Bertie MacGregor, Patsy Perlman, Mike Resch, Bob Ringler (compiler), Mike Smith, Jim Stasz, Charles Swift, Dave Wallbeck, Pete Webb, Joy Wheeler.

HARFORD (Harf) 4 observers.

Bill Braerman, Matt Peterson, Spike Updegrove, John Wortman.

CECIL (Cec1) 2 observers. 4 a.m. to 1 p.m. Clark Jeschke, Marianne Rentsch.**ANNE ARUNDEL (AnAr) 17 observers. 3:00 a.m. to 9:00 p.m.**

Ron Amoss, Bob Augustine, Danny Bystrak, Amelia Cockran, Phil DuMont, Alberta Flashman, Ellen Gizzarelli (compiler), Sally Henderson, Wayne Klockner, M. Jenkins, Ben Paga, Lynn Palmer, Linda Pivacek, Godfrey Rockefeller, William Sladen, Sally Symington, Hal Wierenga.

PRINCE GEORGES (Pr.G) 30 observers. 12:01 a.m. to 9:00 p.m.

Stanley Anderson, Maureen Blades, Rich Dolesh, Sam Droege, Greg Eck, Janet Ganter, Joe Hanfman, Gary Hensler, Mary Janetatos, Kathy Klimkiewicz, Dorothea Leonning, Greg Lewis, Sam Lyon, Elwood Martin, Jim Nichols, Paul Opler, Robert Patterson (compiler), Betty Porter, George and Harriet Powell, Betsy Reeder, Chan Robbins, Mike Sorensen, Chris Wagnon, Mary and Michael Waris, Robert and Steve Whitcomb, Charles Williams, Lawrence Zeleny.

CALVERT (Calv) 1 observer. 6:00 a.m. to 2:00 p.m. John H. Fales.**ST. MARYS (St.M) 2 observers. 4:30 a.m. to 4:30 p.m. V. Ray and Alden Taylor.****KENT (Kent) 14 observers.**

Joe and Margaret Blair, Arlene Delario, Maggie Duncan, Chris Durham, Jim Grubet, Beverly Henry, Dolly McSorley, Ed and Dottie Mendenhall, Floyd Parks (compiler), Manly Parks, Jack Skinner, Pat Wilson.

CAROLINE (Caro) 37 observers. 12:05 a.m. to 11:00 p.m.

Anabelle Bilbrough, Elsie Bilbrough, Irene Bilbrough, Winifred Bright, Margarethe Butenschoen, Elizabeth Cannon, Kristi Cliff, Elsie Collison, Ethel Engle, Wilber Engle, Roberta Eveland, A. J. Fletcher, Roberta Fletcher, Robin Fletcher, Donna Glime, Inez Glime, Joe Glime, Marvin Hewitt, Naomi Hewitt, Alicia Knotts, Kathleen McKee, Kathy Ann McKee, Sean McKee, Timothy McKee, Mariana Nuttle, Essie Pepper, Ethel Poore, Joan Powell, Wilbur Rittenhouse, Thomas Robbins, Carol Scudder, Carlene Schmick, Dolly Seamans, L. T. Short, Isabelle Todd, Michael Todd, Steve Westre.

TALBOT (Talb) 5 observers.

Lester Coble, Richard Kleen, Jan Reese, Bob Trever, Kathy Trever.

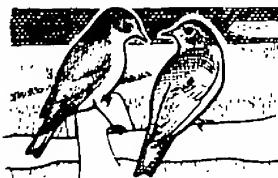
DORCHESTER (Dorc) 3 observers.

Harry Armisatead (compiler), Carl Perry, Erika Wilson.

WICOMICO (Wico) 6 observers.

Ruth Denit, Hugh and Sally Hanson, Charles (compiler), Cail, and Daphne Vaughn.

SOMERSET (Somr) 3 observers. Polly Batchelder, Ralph and Laura French.**WORCESTER (Worc) 2 observers. Frances Brueckmann, Mary Humphreys.**



THE SEASON

SPRING MIGRATION, MARCH 1 - MAY 31, 1980

Robert F. Ringler

Rain played a large role in this spring's migration and probably delayed the arrival of numerous passerines from the south. Precipitation was about an inch and a half above normal in both March and April and near normal in May. The last measurable snowfall was on Mar. 14 when Cumberland received 7 1/2 inches. However, this was dissipated within three days as the thermometer there hit 62° on the 16th. Overall, temperatures averaged 2° below normal in March, 0.7° above normal in April, and 1.1° above normal in May.

The warm moist weather permitted early growth on most trees, the exception being the northeast part of the state where the infestation of Gypsy Moths is epidemic. Consequently, in most areas, the trees were fully green before large numbers of migrant songbirds had arrived and finding them was more difficult in the dense foliage. Particularly good days for observers were May 4 and May 9 following the passage of frontal systems. Migrants sped through during the middle of the month and most had passed before the rains of May 18-21. The mild weather of the remainder of the month allowed the last birds to slip through on time.

In Tables 1 and 2 the earliest arrival and latest departure dates are listed for the counties. For convenience or lack of reports Harford and Cecil Counties have been combined; Charles, Calvert, and St. Marys have been included as Southern Maryland; Kent and Queen Annes Counties have been combined; and the Lower Eastern Shore comprises Somerset, Wicomico, and Worcester Counties. Under these columns respectively in the tables all dates are from Harford except those followed by a "c" for Cecil; Southern Maryland dates are from Charles except those followed by a "c" for Calvert, "s" for St. Marys, or "+s" for Charles and St. Marys both; in the Ke/QA column "q" follows dates from Queen Annes, all others are from Kent; for the Lower Eastern Shore most dates are from Worcester, but others from Wicomico are followed by "w", Somerset by "s", and "+w" indicates both Worcester and Wicomico. A zero in the table indicates the species was not seen in the county, a dash indicates the bird was seen in the county during the season but the date was not significant as either an arrival or departure, and underscored dates indicate birds that were banded.

Contributors: Garrett County - Fran Pope, Sallie Thayer; Allegany - Jim Paulus; Washington - Dan Boone, Alice Mallonee; Frederick - David

Table 1. Spring Arrival Dates, 1980

Species	Median		Garr	Alle	Wash	Fred	Carr	Balt	HaCe	Howa	Mont	Pr-G	AnAr	SoMd	KeQA	Caro	Taib	Dorc	LES
	10-yr	1980																	
Common Loon	4/12	4/ 5	3/26	4/28	--	--	4/ 5	4/12	0	4/18	--	--	4/ 2	4/ 6s	4/26	0	3/28	3/30	--
Horned Grebe	3/17	3/19	--	3/23	0	0	3/16	3/ 8	0	4/ 8	3/ 1	--	--	--	--	0	3/30	--	--
Pied-billed Grebe	3/16	3/12	3/12	--	0	3/ 1	3/25	3/14	0	3/ 9	--	3/24	--	0	2/13q	--	0	0	--
Double-cr. Cormorant	4/11	3/30	0	0	0	0	--	4/18	--	--	--	0	--	3/ 9	3/26q	4/29	4/ 6	3/30	3/ 3
Great Blue Heron	3/12	3/ 9	3/15	--	--	3/ 9	3/25	3/15	--	3/ 4	2/19	--	--	--	--	--	--	--	3/ 4
Green Heron	4/17	4/14	4/29	4/18	4/23	4/ 7	--	4/14	--	--	4/12	4/11	--	4/ 6s	4/19q	4/18	4/11	--	--
Little Blue Heron	4/25	4/12	5/ 3	0	0	0	0	4/ 1	0	0	0	4/11	4/12	0	5/ 3	0	0	--	--
Cattle Egret	4/10	4/ 6	0	0	0	5/ 1	--	3/16	--	--	--	4/30	--	--	--	3/28	4/ 6	--	--
Great Egret	4/10	4/ 6	0	0	0	--	0	4/20	--	3/17	0	--	0	4/ 6s	--	0	4/11	3/30	--
Snowy Egret	4/13	4/ 7	0	0	0	0	0	--	0	0	0	4/13	4/ 1c	4/ 6q	0	4/ 9	3/30	4/19	
American Bittern	4/14	4/13	0	--	0	--	--	4/19	0	3/30	4/13	--	--	0	4/ 1	--	0	4/19	--
Glossy Ibis	4/ 9	4/ 8	0	0	0	0	0	0	0	0	0	5/ 2	4/ 6s	4/15	0	4/ 8	3/30	--	
Whistling Swan	3/ 7	3/16	3/18	3/23	0	3/ 9	3/20	3/17	0	3/23	3/15	--	--	3/ 9	3/ 5	3/ 8	3/16	--	--
Canada Goose	3/ 3	3/ 7	3/15	3/10	0	3/23	2/29	3/16	--	2/23	3/ 1	2/28	--	3/19	3/ 5	--	--	--	--
Gadwall	3/11	3/11	--	4/ 2	0	0	4/ 5	--	0	--	2/24	0	--	0	2/23q	0	3/11	--	0
Common Pintail	3/ 4	3/ 6	3/15	4/ 2	0	0	3/16	2/18	0	3/ 8	--	0	2/24	0	3/ 5	2/23	3/ 9	--	3/ 4
Green-winged Teal	3/20	3/16	--	3/23	0	4/ 3	3/16	2/ 9	0	3/ 8	4/12	2/26	3/16	3/19	3/18	--	3/ 9	--	0
Blue-winged Teal	3/22	3/26	3/23	3/29	4/22	3/22	4/ 5	4/12	--	3/29	3/15	3/ 8	--	4/ 6s	3/22	4/ 2	3/ 9	3/30	--
American Wigeon	3/ 7	3/ 8	3/27	3/23	0	0	3/16	2/21	0	--	2/24	2/23	0	3/19s	3/ 5	2/23	3/11	--	--
Northern Shoveler	3/18	3/14	0	3/26	0	0	0	0	0	3/22	0	2/26	0	0	3/14	0	0	--	3/ 4
Wood Duck	3/ 9	3/ 9	2/26	3/ 9	--	3/ 9	3/16	2/18	--	3/29	3/ 1	3/15	--	--	--	2/23	--	3/30	--
Redhead	3/ 7	3/ 6	0	3/29	0	0	3/25	3/ 5	0	3/12	0	2/26	0	0	2/13q	3/ 7	2/ 9	0	--
Ring-necked Duck	3/ 9	3/15	3/19	3/15	--	0	3/16	3/15	0	2/21	2/24	3/10	3/16	3/19	3/ 5	--	--	3/ 5	--
Canvasback	3/14	3/15	3/22	3/15	0	0	0	--	0	3/12	0	3/27	0	3/19	3/ 5	0	2/ 9	3/30	3/ 4
Lesser Scaup	3/ 9	3/12	3/19	--	0	0	3/20	--	0	3/20	--	3/ 6	--	--	3/ 5	3/ 6	--	--	0
Common Goldeneye	3/ 3	3/ 6	2/29	--	0	0	0	--	0	--	3/ 8	3/11	--	--	3/ 5	3/ 6	--	--	0
Bufflehead	3/10	3/12	3/23	--	0	0	3/16	3/11	0	2/29	3/ 9	3/13	3/16	--	3/ 5	0	--	--	0
Oldsquaw	3/19	--	0	--	0	0	0	3/15	0	0	0	0	0	3/19	3/ 5	0	--	--	0
Ruddy Duck	3/11	3/25	3/27	3/26	--	0	3/16	--	0	--	0	3/13	--	0	3/25	0	--	0	--
Hooded Merganser	3/ 4	3/ 8	3/10	3/ 7	--	3/ 9	3/16	3/ 1	0	3/12	2/24	2/23	0	0	--	0	0	0	0
Common Merganser	3/ 4	3/14	2/26	--	0	3/ 9	3/16	3/16	0	3/12	--	0	0	--	3/20	0	0	--	0
Red-breast Merganser	3/15	3/22	3/27	3/23	--	3/22	3/16	3/15	0	--	4/ 6	--	0	3/15s	3/20	0	3/23	--	--
Turkey Vulture	--	3/ 8	3/ 8	2/24	--	3/ 7	--	3/15	--	--	3/20	--	3/ 8	3/19	--	--	--	--	--
Sharp-shinned Hawk	3/11	3/11	3/14	--	--	3/10	0	3/23	--	--	--	--	3/ 8	--	4/ 1	3/11	2/17	--	0
Cooper's Hawk	--	3/17	4/13	--	--	4/ 5	0	--	0	0	3/15	--	3/ 8	3/19	2/13q	0	0	0	0
Red-tailed Hawk	2/28	3/ 9	--	--	--	3/ 1	--	3/15	--	--	3/ 9	3/16	3/ 8	--	--	--	--	--	--
Red-shouldered Hawk	--	3/10	3/15	--	--	3/ 1	--	3/16	2/25	--	--	2/16	3/ 8	3/19	3/13	--	--	--	--
Broad-winged Hawk	4/15	4/11	--	4/11	4/23	--	--	4/12	--	4/ 7	4/19	4/ 6	4/10	--	--	--	0	--	--
Osprey	3/26	4/ 3	4/11	4/20	4/ 5	3/29	4/ 5	4/ 4	--	4/10	4/ 6	4/ 3	3/15	3/15s	3/ 5q	3/17	3/10	3/30	--
American Kestrel	3/ 2	3/13	3/ 1	--	--	3/ 1	--	3/23	--	3/12	3/20	3/24	3/ 8	3/15s	3/ 7	--	--	--	--

Table 1 (cont.). Spring Arrival Dates, 1980

Species	Median		Spring Arrival Dates, 1980																
	10-yr	1980	Garr	Alle	Wash	Fred	Carr	Balt	HaCe	Howa	Mont	Pr.G	AnAr	SoMd	KeQA	Caro	Talb	Dorc	LES
Sora	4/26	4/26	0	0	0	4/12	0	0	0	0	0	0	5/ 3	0	5/ 3	0	4/19	--	
American Coot	3/17	3/16	3/19	3/29	--	3/22	3/25	3/16	0	0	3/ 9	3/26	--	3/ 9	2/13q	0	2/ 9	0	3/ 4
Semipalmated Plover	5/ 5	5/ 3	0	5/13	0	5/15	0	5/11	0	0	0	5/ 3	--	0	5/ 3	0	5/ 3	5/ 3	--
Killdeer	2/26	2/25	3/15	--	--	2/17	3/25	2/ 9	--	3/ 4	2/17	3/ 4	--	--	--	2/ 9	--	--	--
Black-bellied Plover	5/ 2	5/ 6	0	0	0	0	0	5/11	0	0	0	0	5/10	0	5/ 3	0	--	3/30	--
Upland Sandpiper	4/26	4/26	5/ 3	0	4/26	4/26	0	5/ 2	0	0	0	0	0	4/22	0	0	0	4/13	0
Greater Yellowlegs	3/24	3/28	0	3/16	--	3/29	0	4/ 4	--	4/27	3/19	3/24	--	0	3/28q	3/27	4/12	-3/30	--
Lesser Yellowlegs	4/15	4/ 4	--	4/18	--	3/29	4/13	4/ 4	--	--	--	3/27	--	4/11	3/28q	0	4/20	3/30	--
Solitary Sandpiper	4/29	4/19	5/ 2	4/15	4/23	4/12	--	4/19	4/29	4/18	4/ 6	4/ 9	--	--	4/26	--	4/27	--	4/20
Spotted Sandpiper	4/27	4/21	4/22	4/15	4/23	4/12	5/ 3	4/10	--	4/24	4/17	4/16	--	--	4/21q	4/23	4/19	4/26	--
American Woodcock	2/28	3/ 9	3/11	3/ 9	4/24	3/13	--	3/ 8	--	3/ 9	2/24	3/17	--	3/ 8	--	2/22	3/ 7	4/19	--
Common Snipe	3/ 9	3/ 8	--	4/18	--	2/17	4/ 5	3/ 1	--	3/ 8	--	--	--	4/ 1c	2/13q	4/ 8	--	--	3/ 3
Semipalm Sandpiper	5/ 4	5/ 3	0	5/11	0	5/15	0	5/ 3	0	4/27	0	5/ 3	--	5/ 3s	4/18	5/ 3	5/ 3	5/ 3	--
Least Sandpiper	5/ 1	4/23	--	4/27	--	4/19	0	4/19	--	--	4/29	--	--	4/18	--	4/27	--	--	--
White-rump Sandpiper	5/ 6	5/10	5/ 3	--	0	0	0	5/11	0	0	0	5/ 3	5/14	0	5/ 3	0	0	5/10	5/10
Pectoral Sandpiper	4/11	4/11	0	4/27	0	4/ 3	0	4/12	--	--	0	5/ 1	0	0	4/11	--	--	3/30	0
Dunlin	4/24	4/23	0	4/27	0	5/ 3	0	4/19	0	0	0	0	3/16	0	4/18	0	--	5/ 3	--
Ring-billed Gull	3/ 3	3/ 4	3/15	3/ 9	--	2/18	2/29	--	3/15	3/10	2/17	2/16	--	--	--	--	--	--	--
Laughing Gull	4/ 7	4/ 6	0	0	0	'0	0	3/29	5/ 3c	0	5/ 3	--	--	4/ 6s	3/31q	4/19	4/ 4	3/30	4/19
Bonaparte's Gull	3/31	3/30	4/17	4/ 2	--	/ 0	0	3/23	--	0	--	--	--	--	--	0	3/30	3/30	--
Common Tern	5/ 1	4/19	0	4/30	0	0	0	4/12	0	0	0	0	0	5/ 3s	0	0	0	4/19	4/19
Little Tern	5/ 4	5/ 3	0	0	0	0	0	5/ 3	0	0	0	0	0	4/30	5/ 3s	5/ 2q	0	5/ 3	5/ 3
Royal Tern	--	4/11	0	0	0	0	0	0	0	0	0	0	0	4/30	5/ 3s	0	0	4/11	3/30
Caspian Tern	4/20	4/12	0	0	0	0	0	4/ 4	0	0	0	0	0	5/ 3	4/ 6s	0	0	4/19	0
Yellow-billed Cuckoo	5/ 6	5/ 3	--	--	--	5/ 3	--	4/26	--	5/ 3	5/ 3	5/ 1	5/ 3	5/ 3s	4/29q	4/26	4/27	5/ 3	5/ 3
Black-billed Cuckoo	5/ 7	5/11	5/29	0	0	0	5/11	0	--	5/10	5/ 7	--	0	5/13	5/ 6	0	0	5/11	--
Whip-poor-will	4/23	4/19	--	4/20	4/24	--	4/20	4/ 9	4/15	--	4/23	--	--	--	4/14	--	4/18	4/19	--
Common Nighthawk	5/ 6	5/ 8	5/22	5/ 6	--	5/12	--	4/30	5/11	5/ 1	5/11	5/ 4	--	--	--	--	--	5/10	--
Chimney Swift	4/18	4/13	--	4/15	4/12	4/ 8	4/13	4/10	4/20	4/13	--	4/13	4/13	4/ 5	4/20q	--	4/ 3	--	4/19
Ruby-thr Hummingbird	4/29	5/ 3	--	5/ 3	5/ 3	5/ 3	--	5/ 3	--	5/ 1	4/27	5/ 1	5/ 3	5/ 3c	5/ 3	4/22	4/28	5/ 3	4/20
Belted Kingfisher	3/15	3/ 6	3/ 7	--	--	3/ 9	--	2/21	--	2/19	--	3/16	--	--	--	--	--	3/ 5	--
Common Flicker	3/18	3/11	4/ 7	--	--	2/24	4/ 5	3/ 7	--	2/23	--	3/16	--	--	--	--	--	--	--
Yellow-bell Sapsucker	--	3/26	4/10	--	--	3/22	--	3/30	0	2/23	--	4/18	0	0	3/26	3/ 1	0	0	0
Eastern Kingbird	4/26	4/24	5/ 3	4/29	4/24	4/24	--	4/20	5/ 3c	4/23	4/23	4/10	--	4/12	4/29q	5/ 3	4/24	5/ 3	--
Gt Crest Flycatcher	5/ 1	5/ 3	5/ 5	5/ 3	5/ 3	5/ 3	--	5/ 2	--	5/ 2	4/26	5/ 3	5/ 3	5/ 3s	5/ 3	4/17	4/26	5/ 3	4/19
Eastern Phoebe	3/17	3/19	3/17	--	--	3/22	3/25	3/20	3/23	3/17	3/ 8	2/26	3/27	3/19	--	3/ 3	--	3/30	--
Acadian Flycatcher	5/ 5	5/ 3	--	5/ 3	--	5/ 5	5/ 3	5/ 3	--	5/ 3	4/26	5/ 3	--	5/ 3s	--	5/ 3	5/ 3	5/ 3	--
Willow Flycatcher	5/20	5/24	--	--	--	--	5/24	5/24	5/31	5/13	5/13	--	--	0	0	0	0	0	
Least Flycatcher	5/ 5	5/ 3	5/18	5/ 3	0	--	0	5/ 3	0	5/ 3	5/ 9	0	0	0	0	0	0	0	0
Eastern Pewee	5/ 5	5/ 3	5/ 3	--	5/ 3	--	--	5/ 3	5/ 3c	5/ 1	4/20	--	--	5/ 3s	5/ 3	4/19	4/30	5/ 3	--
Tree Swallow	3/29	3/29	4/17	4/ 2	4/23	3/29	4/ 5	4/ 4	--	4/17	3/24	3/17	3/ 8	3/19s	3/19q	3/26	3/19	3/30	--

Table 1 (cont.). Spring Arrival Dates, 1980

Species	Median																		
	10-yr	1980	Garr	Alle	Wash	Fred	Carr	Balt	HaCe	Howa	Mont	Pr.G	AnAr	SoMd	KeQA	Caro	Talb	Dorc	LES
Bank Swallow	5/ 1	4/19	--	--	--	4/26	0	4/19	--	4/20	4/19	4/15	4/20	--	--	--	4/19	--	4/20
Rough-winged Swallow	4/16	4/ 6	5/ 3	4/11	4/12	3/29	4/ 5	3/25	--	4/10	3/23	4/11	4/ 7	4/ 6s	--	--	4/ 5	--	--
Barn Swallow	4/ 6	4/ 6	5/ 3	4/ 2	4/12	4/10	4/ 5	4/ 4	4/16	--	4/ 8	4/ 5	4/ 3	4/ 6s	4/ 3q	--	4/ 6	3/30	4/19
Cliff Swallow	5/ 2	4/23	5/ 3	4/14	5/ 3	0	4/13	4/13	0	5/ 3	3/30	5/ 3	4/ 5	0	--	0	5/ 3	0	
Purple Martin	4/ 2	3/30	--	3/27	4/ 2	3/29	4/ 5	3/25	--	4/18	3/16	3/18	4/ 7	4/ 6+s	--	3/28	3/30	3/30	--
Brown Creeper	--	3/29	--	--	--	3/ 9	4/ 6	3/28	--	4/10	--	--	--	3/30	3/21	--	--	--	--
House Wren	4/21	4/20	5/ 1	4/24	4/21	4/24	4/20	4/ 6	4/29	4/17	4/20	3/24	4/13	--	5/ 2q	4/18	4/29	--	--
Gray Catbird	4/25	4/27	5/ 3	5/ 3	5/ 1	5/ 1	5/ 3	4/20	4/ 5	4/13	4/15	4/13	--	4/ 6s	4/22q	--	4/27	--	--
Brown Thrasher	4/ 8	4/11	4/20	4/ 7	4/21	4/17	4/20	3/29	--	4/11	3/16	4/ 7	--	4/11+s	4/9q	--	4/ 4	4/12	--
American Robin	2/22	3/ 3	3/ 9	--	2/18	3/ 2	--	3/ 8	3/ 9	3/ 5	2/22	3/ 3	--	3/ 3	--	2/25	2/ 9	--	--
Wood Thrush	4/23	4/28	5/ 3	5/ 3	4/25	5/ 3	5/ 3	4/26	4/26	4/30	4/22	4/25	--	--	--	4/22	4/27	--	--
Hermit Thrush	4/12	4/16	4/16	0	4/23	--	0	4/12	--	4/10	4/18	4/30	--	0	3/25	0	4/30	4/12	--
Swainson's Thrush	5/ 6	5/ 3	5/ 3	0	0	--	0	5/ 3	5/11	5/ 6	4/22	5/ 3	5/ 3	5/ 3c	5/ 8	--	0	0	0
Gray-cheeked Thrush	5/ 9	5/11	5/15	0	0	0	0	5/13	0	0	5/ 3	--	5/10	0	5/ 7	5/15	0	0	0
Veery	5/ 3	5/ 3	5/ 3	5/ 3	--	5/ 8	--	4/14	5/ 3+c	5/ 1	4/20	5/ 3	5/ 3	0	5/ 3	5/ 9	5/ 9	0	0
Eastern Bluebird	2/25	2/24	3/15	--	--	2/24	--	2/14	--	3/ 8	--	3/24	--	--	2/15	2/21	--	--	--
Blue-gray Gnatcatch	4/11	4/11	4/17	4/11	--	4/ 5	4/13	4/ 8	4/13	4/ 4	4/ 7	3/30	--	4/ 6s	4/22q	--	4/13	4/12	--
Golden-cr Kinglet	3/26	3/27	0	0	0	4/ 4	--	3/25	0	0	0	0	0	--	3/ 6	--	--	3/30	--
Ruby-cr Kinglet	4/10	4/ 6	4/ 7	--	--	3/22	--	3/20	4/12	4/ 3	3/16	4/10	--	4/11+s	4/ 9	--	4/ 5	--	--
Water Pipit	3/23	3/20	3/12	3/15	--	3/25	0	4/13	0	0	2/24	4/ 5	0	0	0	--	0	--	0
Cedar Waxwing	2/22	3/ 9	--	--	--	3/ 2	--	3/24	--	3/ 9	--	3/ 4	--	--	--	--	3/28	--	--
White-eyed Vireo	4/20	4/16	5/ 2	--	--	--	--	4/10	--	4/20	4/20	4/15	4/13	4/11	--	4/18	4/13	--	4/19
Yellow-thr Vireo	4/30	4/24	0	--	--	--	--	4/24	--	5/ 1	4/26	4/24	4/24	--	--	--	--	--	4/20
Solitary Vireo	4/26	4/18	4/ 9	4/20	--	--	0	4/19	0	4/18	4/15	4/13	--	0	4/22	0	4/30	0	0
Red-eyed Vireo	4/30	4/20	--	--	--	--	--	4/19	--	4/20	4/20	4/20	--	4/22q	4/24	4/27	--	4/20	
Warbling Vireo	4/30	4/26	0	4/27	4/23	4/26	--	5/ 2	--	--	4/26	--	--	0	--	--	--	0	--
Black-& white Warb	4/22	4/20	--	--	4/24	--	--	4/13	--	4/12	4/24	4/12	4/22	4/12	4/22	--	4/25	--	4/19
Prothonotary Warbler	4/23	4/22	0	5/ 3	--	4/26	0	--	5/ 3c	0	4/13	4/22	4/22	--	--	4/20	4/28	--	4/19
Worm-eating Warbler	5/ 1	4/30	0	5/ 3	4/25	--	--	4/20	5/ 3c	5/ 1	4/25	4/25	5/ 3	--	5/ 3	4/25	4/30	5/ 3	4/19
Golden-wing Warbler	5/ 3	5/ 3	5/15	5/ 2	5/ 3	0	0	4/28	0	5/ 3	4/30	5/ 3	0	0	5/ 3	0	5/ 3	0	0
Blue-winged Warbler	5/ 3	5/ 3	0	5/ 3	5/ 3	--	5/ 3	5/ 2	5/ 3+c	5/ 2	4/30	4/28	5/ 3	5/ 3s	4/29+q	5/ 3	4/28	5/ 3	5/ 3w
Tennessee Warbler	5/ 5	5/ 3	5/ 7	5/ 3	0	0	0	5/ 3	5/ 3	0	4/26	4/26	5/ 3	0	5/ 3	5/ 3	0	0	--
Nashville Warbler	5/ 2	5/ 3	5/ 3	4/27	5/ 3	5/ 3	0	5/ 3	0	5/ 3	4/25	5/ 1	5/ 3	0	5/ 3	0	0	0	0
N. Parula Warbler	4/23	4/20	--	4/27	4/24	4/24	4/20	4/15	5/ 3c	4/10	4/12	4/ 3	4/20	4/11	4/29q	4/23	4/25	--	4/19
Yellow Warbler	4/25	4/24	4/25	4/27	4/23	4/26	--	4/22	--	4/18	4/20	4/22	4/24	--	--	4/28	4/29	--	--
Magnolia Warbler	5/ 5	5/ 3	5/ 3	5/ 3	0	5/11	0	5/ 6	5/ 3	5/ 3	4/26	--	5/ 3	0	5/ 3	5/14	0	0	--
Cape May Warbler	5/ 4	5/ 3	5/15	--	0	5/ 3	0	5/ 3	5/ 3c	5/ 3	5/ 3	5/ 3	5/ 3	--	4/29	0	0	0	0
Black-thr Blue Warb	5/ 4	5/ 3	5/ 3	4/26	5/ 3	5/ 3	0	5/ 2	5/ 3	5/ 3	4/26	4/24	4/24	5/3cs	4/30	5/ 6	5/ 1	5/10	0
Yellow-rumped Warb	4/14	4/ 5	--	--	--	3/22	4/13	4/12	--	4/ 5	4/13	3/24	--	--	3/20	--	4/ 6	--	--
Black-thr Green Warb	5/ 4	5/ 2	4/28	4/26	4/23	5/ 3	0	5/ 2	5/ 8	5/ 3	4/26	4/ 1	5/ 3	5/ 3s	5/ 3	5/ 4	5/10	5/10	--

Table 1 (cont.). Spring Arrival Dates, 1980

Species	Median		Garr	Alle	Wash	Fred	Carr	Balt	HaCe	Hawa	Mont	Pr.G	AnAr	SoMd	KeQA	Caro	Talb	Dorc	LES
	10-yr	1980																	
Cerulean Warbler	5/ 3	5/ 3	0	5/ 3	5/ 3	--	5/ 3	5/ 2	--	4/26	4/27	4/26	--	5/ 3s	5/ 3	0	5/ 3	0	0
Blackburnian Warbler	5/ 5	5/ 3	5/ 3	5/ 3	0	0	4/28	--	--	--	4/26	5/ 3	5/ 3	5/ 3s	4/30	0	5/ 2	0	0
Yellow-throated Warbler	4/16	4/16	0	4/27	4/12	--	4/22	4/20	0	4/26	4/ 6	4/30	0	0	0	4/11	4/13	--	4/ 7
Chestnut-sided Warb.	5/ 5	5/ 3	5/ 3	--	5/ 3	0	0	5/ 2	0	5/-7	5/ 3	5/ 3	--	0	4/24	5/ 6	0	0	0
Bay-breasted Warbler	5/ 7	5/ 3	5/ 3	0	0	0	0	5/ 3	5/11	5/14	5/ 3	5/10	5/ 3	5/ 3s	5/ 7	0	5/14	0	0
Blackpoll Warbler	5/ 6	5/ 6	0	0	--	5/21	0	5/ 7	0	5/16	4/26	5/ 7	5/ 3	5/ 3s	5/ 6	0	5/ 6	5/10	--
Pine Warbler	3/17	3/23	--	3/30	--	3/23	--	3/23	--	3/29	--	--	--	3/11c	2/13q	3/24	2/19	3/30	--
Prairie Warbler	4/24	4/22	--	4/29	4/24	--	--	4/20	--	4/21	4/26	4/ 3	--	--	4/29q	--	4/20	--	--
Palm Warbler	4/14	4/ 7	--	--	0	4/10	0	4/ 9	--	4/17	4/ 3	4/ 6	--	0	3/20	0	0	0	0
Ovenbird	4/23	4/23	5/ 3	--	4/23	5/ 2	5/ 3	4/20	5/ 3	4/23	4/17	4/12	4/22	4/12	4/29q	5/ 3	4/27	--	4/19
Northern Waterthrush	5/ 1	5/ 3	--	4/29	4/24	--	5/ 3	4/20	5/3+c	5/ 3	4/21	5/ 3	5/ 3	0	4/26	5/ 3	0	0	5/ 3w
Louisiana Waterthr.	4/ 7	4/ 6	--	4/11	4/ 6	4/24	--	4/ 4	--	4/ 9	4/ 5	4/ 6	--	4/ 6	4/ 3	4/21	4/13	--	4/ 7
Kentucky Warbler	5/ 3	5/ 3	5/ 3	0	5/ 3	5/ 7	--	4/19	5/3+c	5/ 3	4/25	4/22	5/ 3	5/3cs	5/ 3	5/ 3	4/29	5/ 3	4/19
Common Yellowthroat	4/21	4/19	--	5/ 2	4/23	5/ 1	--	4/19	--	4/24	4/20	4/16	--	4/11s+4/22q	4/15	4/12	4/12	--	--
Yellow-breasted Chat	5/ 3	5/ 3	--	5/ 3	5/ 3	--	--	4/26	5/ 3	5/ 3	4/29	5/ 3	5/ 3	5/ 3c	5/ 3	5/ 3	5/ 3	5/ 3	--
Hooded Warbler	5/ 1	4/25	--	--	--	--	--	4/12	--	4/26	4/25	5/ 1	--	--	0	--	--	0	4/19
Wilson's Warbler	5/ 6	5/ 3	0	0	0	--	0	5/ 9	0	0	5/ 3	5/ 3	5/ 3	0	5/ 3	0	0	0	0
Canada Warbler	5/ 7	5/ 7	5/15	5/ 3	0	--	0	4/19	0	5/14	5/ 7	--	--	0	5/ 3	0	0	5/10	0
American Redstart	4/30	4/20	--	--	4/25	--	--	4/19	--	4/29	4/20	4/20	--	--	--	4/30	--	4/19	--
Bobolink	5/ 5	5/ 3	4/18	--	4/26	--	0	4/18	5/ 6	5/ 3	5/ 3	4/30	5/ 3	5/ 3c	--	5/ 8	5/ 6	5/ 3	0
Red-winged Blackbird	2/21	2/24	--	2/26	2/19	3/ 2	--	2/21	2/24	--	2/23	2/29	--	--	--	--	--	--	--
Orchard Oriole	5/ 1	5/ 2	0	5/ 3	5/ 3	5/ 1	--	4/23	5/3+c	5/ 3	4/23	4/25	5/ 3	5/ 3s	4/29q	5/ 1	4/27	5/ 3	--
Northern Oriole	4/30	5/ 1	5/ 3	4/27	5/ 1	5/ 1	5/ 3	5/ 3	5/3+c	4/18	--	4/13	--	--	--	4/28	4/29	--	--
Rusty Blackbird	3/ 7	3/28	--	--	--	4/ 3	0	--	0	4/18	3/15	3/23	--	0	3/18	0	4/ 6	--	0
Common Grackle	2/20	2/24	--	2/24	--	2/18	--	3/ 5	--	2/24	2/23	3/ 1	--	--	--	--	--	--	--
Scarlet Tanager	5/ 1	5/ 2	5/ 3	5/ 3	5/ 3	5/ 3	--	5/ 2	--	--	5/ 2	4/24	4/24	--	--	4/24	--	--	--
Summer Tanager	5/ 5	5/ 3	--	0	0	--	0	--	0	0	5/ 3	5/ 3	5/ 3	5/ 3s	0	4/20	4/28	5/ 3	--
Rose-breasted Grosbeak	5/ 4	5/ 3	5/ 3	5/13	5/ 3	5/ 7	5/ 3	5/ 3	5/3+c	5/ 3	4/16	5/ 3	5/ 3	0	5/ 3	5/ 3	5/ 4	5/10	--
Blue Grosbeak	5/ 5	5/ 3	0	5/18	5/ 3	--	--	5/ 2	--	5/15	5/ 3	5/ 3	5/ 3	5/ 3s	5/ 3	5/ 3	4/30	5/ 3	5/3+w
Indigo Bunting	5/ 1	5/ 3	5/ 7	5/ 3	5/ 3	5/ 3	5/ 3	5/ 2	5/ 6	4/25	4/26	3/26	5/ 3	5/ 3s	5/ 3	5/ 3	5/ 3	5/ 3	5/3sw
Purple Finch	2/16	4/ 8	4/13	--	--	--	4/ 5	4/12	--	--	--	3/16	4/22	--	--	3/27	--	0	0
Rufous-sided Towhee	3/24	4/ 5	3/22	4/ 7	--	4/17	4/ 5	4/ 1	--	4/16	--	4/ 4	--	4/ 6s	--	--	--	--	--
Savannah Sparrow	3/26	4/ 9	--	3/27	4/23	3/15	0	4/12	0	4/29	4/ 9	2/29	2/24	3/19s	4/22	--	4/13	--	--
Grasshopper Sparrow	5/ 2	5/ 3	5/ 3	--	4/23	4/27	--	5/ 3	5/ 1	4/ 8	5/ 3	5/ 3	5/ 3	5/ 3s	5/ 3	5/ 3	4/19	5/ 3	5/ 3s
Vesper Sparrow	4/ 4	4/12	--	4/15	4/23	4/27	4/ 5	4/12	--	--	4/12	--	0	0	3/19q	4/ 3	0	0	0
Chipping Sparrow	4/ 4	4/ 8	4/16	3/27	--	4/22	--	3/31	4/12	4/ 8	4/ 5	4/ 7	--	3/22	4/ 9q	4/ 1	3/19	4/12	--
White-crowned Sparrow	5/ 3	4/26	5/ 3	5/ 2	4/26	--	--	4/18	0	4/11	4/ 2	5/ 3	--	--	--	--	0	0	0
Fox Sparrow	2/28	2/27	--	0	0	3/ 9	--	--	0	2/23	2/12	2/24	2/27	3/12	3/ 2	3/ 8	2/24	0	0
Lincoln's Sparrow	5/11	5/11	5/16	0	0	0	0	5/11	0	0	5/11	0	0	5/ 3c	0	0	0	0	0
Swamp Sparrow	4/17	4/15	4/25	--	--	4/ 3	--	4/15	--	5/ 2	4/17	4/30	--	4/11s	3/22	--	3/16	--	--

Wallace; Carroll - Bill Ellis, Gerry Newton; Baltimore - John and Peg Barber, Jeff Bickart, Warren Bielenberg, Peggy Bohanan, Gladys Cole, Bob Jarboe, Hank Kaestner, Peter Knight, Michael Reid, Joe Schreiber, Eddie Slaughter, Jim Stasz; Harford - Dennis and Jean Kirkwood; Howard - Brenda and John Bell, George Chase, Martha Chestem, Frances Ehlers, David Holmes, Kris Krishnamoorthy, Grazina and Mike McClure, Rosamond Munro, Steve Simon, Jo Solem, Jean Solomon, Earl Strain, Eva Sunell, Mark Wallace; Montgomery - Larry Bonham, Margaret Donald, Bob Warfield; Prince Georges - Rick Blom, Danny Bystrak, Ric Conn, Bill and Floyd Hayes, Betsy Reeder, Chan Robbins; Anne Arundel - Hal Wierenga; Charles - Paul Nistico; Kent/Queen Annes - Chris Ludwig, Floyd Parks; Talbot - Terry Allen, Les Coble, Dick Kleen, Jan Reese, Roger Stone, Bob and Kathy Trever; Caroline - Kristi Cliff, Ethel and Wilber Engle, Roberta Eveland, A.J. and Roberta Fletcher, Inez Glime, Marvin Hewitt, Alicia Knotts, Kathleen McKee, Mariana Nuttle, Ethel Poore, Wilbur Rittenhouse, Carol Scudder, Oliver Smith; Lower Eastern Shore - Henry Armistead, Carl Perry.

Loons, Grebes. An early Common Loon was on Broadford Reservoir on Mar. 26 (Pope). Wierenga counted a season total of 830 Common Loons flying past Sandy Pt. this spring with a peak of 236 on Apr. 12. Other reports of note were 26 in Talbot County on Apr. 11 (Reese), 17 near Bellevue, Talbot Co. on Apr. 13 (Armistead), 17 over Laurel on May 2 (Robbins), and 3 at Piney Run Park, Carroll Co. on May 24 (Ringler). Late Red-throated Loons were seen at Ocean City on May 11 (Robbins, et al.), on the lower Patuxent River on May 23 (Erika Wilson), and at Baltimore on May 31 (Stasz, Blom, Ringler). The only Red-necked Grebes reported this year were at Baltimore on Mar. 29 (Ringler) and at Piney Run on Apr. 5 (Blom, Reeder). High counts of Horned Grebes came from Pt. Lookout where Blom estimated 500 on Apr. 6 and 200 on Apr. 11, and from Bellevue where Armistead counted 185 on Apr. 13 and 383 on Apr. 19. Two Pied-billed Grebes on a pond at Mardela Springs on May 9 (Allen, Coble, Reese) were rather late to be migrants.

Pelagics, Cormorants. On a May 25 pelagic trip out of Ocean City observers counted 9 Sooty Shearwaters and approximately 250 Wilson's Storm Petrels. Blom saw one adult and one immature Great Cormorant at St. George Island on Mar. 19. Early Double-crested Cormorants were at Ocean City on Mar. 3 (Slaughter), at the east end of the Bay Bridge on Mar. 26 (Allen), and 115 at Hooper Island on Mar. 30 (Armistead, Perry). As usual the cormorants massed in St. Marys County where Blom estimated 300 at Pt. Lookout on Apr. 6 and 6,300 there on Apr. 11. Other sightings of note were at Baltimore, Apr. 18 (Bielenberg), Denton on Apr. 29 (Hewitt), 50 in Talbot County on May 9 (Reese), 1 at the Waterford Farm in Howard County on May 23 (M. Wallace), and 1 at Piney Run on May 24 (Ringler). Rich Rowlett spotted an immature or female Magnificent Frigatebird at Ocean City on Apr. 28 and followed it north into Delaware.

Herons and Ibis. Armistead and Perry counted 75 nests of Great Blue Herons at Bloodsworth Island on Mar. 30. Early Green Herons were seen on Apr. 11 at Upper Marlboro (Blom) and 3 in Talbot County (Allen, Reese). Early Little Blue Herons were in Baltimore on Apr. 1 (Barber),

a "calico" bird at Upper Marlboro on Apr. 11 (Blom), and an adult at Sandy Pt. on Apr. 12 (Wierenga). Cattle Egrets were widely reported with a record-early bird in Cabin Branch, Curtis Bay section of Baltimore City on Mar. 16 (Stasz, et al.). This one was followed by 5 at Tanyard on Mar. 28 (E. Engle), 1 at Back River on Apr. 4 (Blom), 25 in Talbot County on Apr. 6 and 50 there on Apr. 13 (Reese), 33 near Bellevue on Apr. 26 (Armistead) including one almost uniformly salmon-colored bird, 4 at Beltsville on Apr. 30 (Robbins), 8 at Locust Grove, Frederick Co. on May 1 (D. Wallace), 21 in Cecil County on May 3 (Clark Jeschke), 2 at Merkle Wildlife Management Area on May 7 (Robbins), 7 at Laurel on May 18 (Robbins), and another salmon-colored bird sighted near Whaleyville on May 19 (Armistead, et al.). An early Great Egret was at a farm pond near Clarksville on Mar. 17 (Reeder) and one was at Pt. Lookout on Apr. 6 (Blom, Reeder). There were 3 Snowy Egrets at Calvert Cliffs on Apr. 1 (Blom) and 1 at Kent Narrows on Apr. 6 (Allen). A Black-crowned Night Heron was at Knoxville, Frederick Co. on Apr. 5 (Warfield), 3 were at Sandy Pt., May 3 (Wierenga), and 1 was in Allegany County on May 18 (Paulus). The first Yellow-crowned Night Herons were 2 adults at Sycamore Landing, Montgomery Co. on Apr. 5 (Murphy, Don Messersmith), and 2 adults were seen along Snowden's Run in Carroll County on May 10 (Ellis). The high count of Least Bitterns was 8 in Southern Dorchester County on May 10 (Armistead, et al.). Boone heard an American Bittern calling in the Elliott Island marshes on Apr. 19, 3 were at Summit Hall Turf Farm on Apr. 20 (Jean Howell), and late birds were at Lilypons on May 15 (D. Wallace) and at Sandy Pt. on May 18 (Wierenga). The first Glossy Ibis were 2 at Blackwater on Mar. 30 (Armistead, Perry) followed by 1 at Pt. Lookout on Apr. 6 (Blom, Reeder), 3 at Bozman on Apr. 8 (Ernie Burns), 1 at Allen's Fresh, Charles Co. on Apr. 11 (Blom), 1 in Queen Anne's County on Apr. 15 (Ludwig), 3 at Sandy Pt. on May 2 (Wierenga), and an impressive 150 flying over St. Michaels on May 22 (Reese).

Swans and Geese. There were 26 Mute Swans near Bellevue on May 17 (Armistead). Warfield noted the main flight of Whistling Swans and Canada Geese over Germantown on Mar. 16 while Blom saw a big flight on the evening of Mar. 19 at Myrtle Grove Wildlife Management Area with 930 swans and 1,400 geese counted before dark and another 6 flocks of swans and 4 flocks of geese heard after dark. Blom spotted one "Blue" Goose in one of the Canada Goose flocks. Eric Blanks reported 60 Brant at Ocean City on Mar. 31. A Snow Goose lingered on a pond near Worton, Kent Co. from Apr. 18 through May 16 (Parks). Kaestner saw 3 "Blue" Geese flying over Hunt Valley, Baltimore Co. on Mar. 22, and Reese saw 2 in Talbot County on Apr. 2.

Ducks. A hen Mallard with 11 downy young was on the C & O Canal above Oldtown on Apr. 29 (Paulus). On Mar. 30 in Southern Dorchester County Armistead and Perry estimated 35 Gadwalls, 120 Pintails, 195 Green-winged Teal, 70 Blue-winged Teal, and 40 Northern Shovelers. Reese counted 30 Blue-winged Teal at Kent Narrows on Apr. 13. There were 50 American Wigeon at Piney Run on Apr. 5 (Blom, Reeder) and a very late bird at Patuxent Wildlife Research Center on May 31 (Bystrak). A late drake Northern Shoveler was on a farm pond near Triadelphia Reservoir in Howard County on May 17 (M. Wallace, John Moroney). Blom saw 12

Table 2. Spring Departure Dates, 1980

Species	Median																				
	10-yr	1980		Garr	Alle	Wash	Fred	Carr	Balt	HaCe	Howa	Mont	Pr.G	AnAr	SoMd	Kent	Caro	Talb	Dorc	LES	
Common Loon	5/ 9	5/ 7		5/ 3	5/ 3	5/ 3	5/ 3	5/24	5/25	0	5/ 3	5/ 3	5/15	6/ 9	5/ 3s	5/28	0	5/ 7	5/10	5/11	
Horned Grebe	5/ 4	5/ 7		5/ 3	5/19	0	0	--	5/18	0	5/ 3	4/13	4/29	5/10	5/ 3s	--	0	5/ 7	5/10	5/10	
Pied-billed Grebe	5/ 6	5/ 3		5/ 3	5/23	0	--	4/ 5	5/ 9	0	--	5/ 3	5/ 3	5/ 3	0	5/ 3	5/ 3	0	0	5/11	
Dbl-cr. Cormorant	5/20	6/10		0	0	0	0	5/24	6/28	--	5/23	--	0	6/10	--	--	--	6/17	6/ 7	6/17	
American Bittern	--	5/ 3		0	5/ 3	0	5/15	5/ 3	5/ 3	0	5/ 3	5/ 3	5/ 3	5/18	0	5/ 3	5/ 3	0	5/10	4/20	
Whistling Swan	5/ 2	3/25		3/19	3/23	0	--	3/20	3/17	0	3/27	5/ 3	--	--	3/19+s	5/3	--	4/25	5/ 3	--	
Canada Goose	5/ 5	5/ 7		5/ 3	5/14	0	5/22	4/13	5/31	5/ 3c	4/14	5/24	5/ 3	--	--	5/17	--	4/11	--	5/11	
Snow Goose	4/ 3	3/28		0	0	0	0	3/22	0	3/ 8	5/ 3	0	0	3/19	5/16	--	4/ 2	--	--	--	
Gadwall	4/26	5/ 3		5/ 3	4/ 2	0	0	4/ 5	5/ 3	0	4/17	3/ 9	0	5/ 3	0	5/ 3	5/10	0	5/ 3	5/10	
Common Pintail	4/19	4/ 4		3/16	4/ 2	0	0	4/ 5	2/18	0	3/ 8	5/ 3	0	2/24	0	5/ 3	4/ 2	4/13	5/ 3	3/ 4	
Green-winged Teal	4/29	4/29		5/ 3	4/18	0	4/24	5/ 3	4/24	0	5/ 3	4/12	5/ 3	3/16	3/19+s	5/3	5/ 3	4/13	5/ 3	0	
Blue-winged Teal	5/ 5	5/ 3		5/ 3	5/18	5/ 3	5/ 3	5/ 3	5/ 3	5/ 3	4/27	5/ 3	5/10	5/10	4/11s	5/ 3	--	5/ 3	--	--	
American Wigeon	4/23	5/ 3		5/ 3	5/18	0	0	4/ 5	--	0	5/ 3	5/ 3	5/31	0	3/19s	5/ 3	2/23	3/11	3/30	5/ 3s	
Northern Shoveler	4/13	4/12		0	4/ 3	0	0	0	0	0	5/17	0	3/24	0	0	4/18	0	0	4/12	--	
Redhead	4/ 6	3/28		0	4/ 3	0	0	3/25	3/23	0	3/12	0	--	0	0	3/30	4/ 2	--	0	--	
Ring-necked Duck	4/15	4/13		5/ 3	4/ 6	5/ 3	0	3/25	--	0	5/26	--	5/ 7	3/16	3/19	4/ 3	4/15	4/13	--	0	
Canvasback	4/15	4/ 2		3/27	3/15	0	0	0	5/11	0	3/12	0	3/28	0	4/ 6s	4/18	0	4/ 5	3/30	5/11	
Lesser Scaup	5/ 1	4/12		5/ 3	3/29	0	0	3/29	5/31	0	5/19	4/12	--	5/ 3	--	3/30	4/ 2	4/19	3/30	0	
Common Goldeneye	4/26	4/13		2/29	4/13	0	0	0	4/19	0	--	--	6/ 1	--	4/11s	5/ 3	3/ 6	4/19	3/30	0	
Bufflehead	5/ 2	4/27		5/ 3	5/ 3	0	0	3/16	4/21	0	4/17	5/ 3	5/ 3	5/ 3	4/11s	0	5/ 6	3/30	0	0	
Oldsquaw	4/12	4/11		0	4/14	0	0	0	--	0	0	0	0	0	4/11s	3/25	0	4/19	3/30	0	
White-winged Scoter	4/24	4/ 6		0	0	0	0	0	0	0	0	0	3/11	5/10	4/ 6s	3/30	0	5/ 6	3/30	5/11	
Surf Scoter	--	4/12		0	0	0	0	0	0	0	0	0	0	0	0	4/11s	0	0	4/13	3/30	5/11
Black Scoter	--	--		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4/19	3/30	5/11
Ruddy Duck	5/ 5	5/ 3		3/27	4/30	5/ 3	0	5/ 3	5/31	0	5/ 3	0	5/ 3	5/10	0	5/27	0	4/11	0	5/ 3	
Hooded Merganser	4/20	4/18		5/ 3	5/ 3	4/24	4/10	3/16	4/12	0	3/12	3/ 9	5/ 3	0	0	5/ 3	0	0	0	0	
Common Merganser	4/ 9	4/16		5/ 3	5/ 3	0	3/29	3/25	3/29	0	5/ 3	5/ 3	0	0	5/ 3c	3/30	0	0	0	3/30	0
Red-bt Merganser	5/ 5	5/ 3		5/ 3	5/ 3	5/ 3	5/ 3	--	3/25	5/ 9	0	5/ 3	5/ 3	5/ 3	0	4/ 6s	5/ 3	0	4/19	5/10	--
Rough-legged Hawk	4/ 2	4/ 2		0	0	0	0	0	3/ 5	0	0	5/ 3	4/24	4/ 2	--	3/14	0	1/13	4/12	--	--
Northern Harrier	5/ 5	5/ 3		--	5/21	0	5/ 3	0	5/ 3	0	5/ 3	5/ 6	0	5/ 3	5/ 3	4/13	--	--	--	--	--
American Coot	5/ 5	5/ 3		5/ 3	5/ 3	5/ 3	4/ 3	5/ 3	5/ 9	0	0	5/11	5/ 3	5/10	3/19	5/22	0	5/ 7	0	5/11	
Semipalmated Plover	5/27	5/21		0	5/27	0	5/22	0	5/19	0	0	0	--	5/10	0	5/20	0	6/ 1	5/10	6/17	
Black-belly Plover	5/23	5/11		0	0	0	0	0	5/11	0	0	0	0	5/10	0	5/ 3	0	5/25	5/10	6/17	
Greater Yellowlegs	5/ 9	5/12		0	5/18	5/ 3	5/15	0	5/23	5/ 3	6/ 9	5/ 3	5/13	5/10	0	5/15	5/ 3	5/ 9	5/10	6/18s	
Lesser Yellowlegs	5/ 8	5/10		5/ 3	5/26	5/ 3	5/15	--	5/18	5/ 3	5/19	5/ 3	5/13	5/10	--	5/ 9	0	5/ 9	5/10	5/ 3w	
Solitary Sandpiper	5/12	5/ 8		5/ 3	5/ 5	5/ 3	5/22	5/ 3	5/ 3	5/ 3	5/ 8	5/11	5/17	5/10	5/ 3c	5/ 9	5/ 9	5/ 9	5/ 9	5/11	
Spotted Sandpiper	5/22	5/15		--	5/16	--	5/22	--	5/25	--	5/11	5/11	5/18	--	--	5/15	5/ 9	--	--	5/ 9w	
Ruddy Turnstone	5/30	6/10		0	0	0	0	0	0	0	0	0	0	6/13	0	0	0	0	5/ 6	6/ 7	6/17
Common Snipe	5/ 5	5/ 3		5/ 3	4/18	5/ 3	5/ 3	--	4/19	5/ 3	5/ 3	5/ 3	5/10	0	0	3/26	4/ 8	5/ 3	5/ 3	--	--
Sanderling	5/10	5/ 7		0	5/19	0	0	0	0	0	0	0	5/ 3	0	5/ 3s	5/20	0	0	3/30	5/11	
Semipalm Sandpiper	5/26	5/15		0	6/ 5	0	5/15	0	5/18	0	--	0	5/10	5/10	--	5/20	--	5/ 9	5/11	6/17	
Least Sandpiper	5/18	5/10		5/ 3	5/21	5/ 3	5/15	0	5/18	5/ 3	5/19	5/ 3	5/16	5/10	5/ 3s	5/20	5/ 9	5/ 9	5/10	5/10	
White-rumped Sandpiper	--	5/20		--	6/ 5	0	0	0	5/19	0	0	0	0	--	5/21	0	5/15	0	0	5/10	6/17
Pectoral Sandpiper	5/ 6	5/ 3		0	5/ 3	0	4/27	0	--	5/ 3	5/ 8	0	5/ 3	0	0	5/13	5/ 3	5/ 9	5/ 3	0	

Table 2 (cont.). Spring Departure Dates, 1980

Species	Median																			
	10-yr	1981	Garr	Allie	Wash	Fred	Carr	Balt	HaCe	Howa	Mont	Pr.C	AnAr	SoMd	Kent	Caro	Talb	Dorc	LES	
Dunlin	5/25	5/21	0	5/21	0	5/ 3	0	5/18	0	0	0	0	--	0	5/15	0	5/25	6/ 7	6/17	
Ring-billed Gull	5/ 9	5/11	5/ 3	4/15	--	5/11	--	5/11	5/ 3c	3/29	6/ 5	5/10	--	--	6/10	--	5/ 7	--	--	
Bonaparte's Gull	5/ 4	5/ 3	5/ 3	4/27	5/ 3	0	0	5/ 3	5/ 3c	0	5/ 3	5/ 3	5/10	--	--	0	5/ 3	5/ 3	5/11	
Yellow-bellied Sapsucker	5/ 2	5/ 3	5/ 3	5/ 3	4/17	5/ 3	5/ 3	0	4/18	5/ 3	--	0	0	5/ 3	--	0	0	0	0	
Brown Creeper	4/27	5/ 3	5/ 3	--	5/ 3	5/ 3	4/ 6	--	4/10	5/ 3	4/15	--	5/ 3s	4/23	5/ 3	5/ 3	--	--	--	
Winter Wren	4/26	5/ 3	5/29	--	4/25	--	--	5/ 3	--	--	5/ 3	--	--	4/11	0	--	--	4/ 7		
Hermit Thrush	5/ 5	5/ 4	5/10	0	5/ 3	5/ 3	0	5/17	5/ 3	5/ 8	5/10	5/ 9	5/ 3	0	5/ 4	0	4/30	4/12	--	
Swainson's Thrush	5/25	5/25	5/22	0	0	5/23	0	5/28	0	--	5/29	5/25	--	--	5/17	5/29	0	0	0	
Gray-cheeked Thrush	5/23	5/23	5/18	0	0	0	0	5/28	0	0	5/28	5/23	--	0	--	5/17	0	0	0	
Veery	5/18	5/15	--	--	--	5/23	--	5/22	--	5/15	5/25	5/18	5/10	0	5/13	5/10	5/ 9	0	0	
Golden-crowned Kinglet	4/16	4/ 5	0	0	0	4/ 4	4/ 5	4/12	0	0	0	0	0	3/30	3/30	5/ 3	4/ 5	3/30	--	
Ruby-crowned Kinglet	5/ 6	5/ 3	5/ 3	5/11	5/ 3	5/ 7	5/ 3	5/11	5/3+tc	5/ 3	5/ 3	5/ 8	5/10	5/3cs	5/ 9	5/ 3	5/ 5	5/ 3	--	
Water Pipit	5/ 4	5/ 3	5/ 3	--	5/ 3	5/15	0	5/16	0	0	5/ 3	5/ 1	0	0	0	5/ 3	0	5/ 3	0	
Cedar Waxwing	5/27	5/27	--	--	5/20	5/27	--	6/ 1	--	--	5/24	5/26	6/ 9	--	--	5/31	5/14	--	--	
Solitary Vireo	5/ 6	5/ 6	--	--	5/ 3	5/19	0	5/ 9	0	5/ 3	5/ 3	5/ 6	5/10	0	5/ 9	0	5/ 2	0	0	
Tennessee Warbler	5/19	5/13	5/ 7	5/23	0	0	0	5/17	--	0	5/11	5/18	5/10	0	5/13	5/18	0	0	5/ 9w	
Nashville Warbler	5/11	5/12	--	--	--	0	0	5/13	0	--	5/19	--	5/10	0	5/ 9	0	0	0	0	
Magnolia Warbler	5/22	5/21	5/24	--	0	5/26	0	6/ 1	5/13	5/17	5/27	5/22	5/10	0	5/17	5/21	0	0	5/11	
Cape May Warbler	5/14	5/14	5/22	5/22	0	5/11	0	5/ 5	--	5/14	--	5/17	5/10	0	5/13	0	0	0	0	
Black-throated Blue Warbler	5/16	5/15	--	--	--	0	0	5/17	--	--	5/22	5/17	5/10	--	5/13	--	--	5/10	0	
Yellow-rump Warbler	5/14	5/10	5/ 9	5/ 3	5/ 3	5/10	5/ 3	5/17	5/ 4	5/13	5/11	5/31	5/10	5/3cs	5/20	5/ 3	5/14	5/10	5/11	
Blacked-throated Green Warbler	5/14	5/11	--	5/18	--	--	0	5/11	5/ 8	5/12	--	--	5/10	0	5/13	0	5/22	5/10	5/11	
Blackburnian Warbler	5/16	5/13	--	--	--	0	0	5/28	5/11	5/10	5/16	5/13	5/10	--	5/28	0	--	0	0	
Chestnut-sided Warbler	5/17	5/10	--	--	--	0	0	5/24	0	5/ 7	5/16	5/ 8	5/10	0	5/16	5/ 6	0	0	0	
Bay-breasted Warbler	5/18	5/16	5/16	0	0	0	0	5/17	5/11	5/15	5/11	5/22	5/10	--	5/17	0	5/15	0	0	
Blackpoll Warbler	5/31	5/24	0	0	5/17	5/23	0	5/31	0	5/31	5/24	5/25	--	--	5/28	0	5/14	--	5/11	
Palm Warbler	5/ 4	5/ 3	5/ 3	5/ 3	0	5/ 3	0	--	5/ 3	5/ 3	5/ 3	5/ 3	5/10	0	4/26	0	0	0	0	
Northern Waterthrush	5/20	5/23	--	5/27	--	5/23	--	5/28	5/17	--	5/31	5/26	--	0	5/15	5/13	0	0	5/11	
Wilson's Warbler	5/24	5/18	0	0	0	5/26	0	5/16	0	0	5/20	--	--	0	5/ 7	0	0	0	0	
Canada Warbler	5/27	5/27	--	--	0	5/26	0	5/28	0	5/22	5/29	5/27	5/10	0	6/ 8	0	0	5/10	0	
American Redstart	5/29	5/27	--	--	5/27	--	5/30	--	5/27	5/27	--	5/27	5/27	--	5/26	--	6/ 8	--	--	
Bobolink	5/16	5/17	--	5/21	--	5/10	0	5/26	0	6/10	5/17	5/16	5/10	--	5/17	5/14	5/ 6	6/ 1	0	
Rusty Blackbird	5/ 6	5/ 3	5/ 3	5/ 3	5/ 3	5/24	0	5/ 3	0	4/26	5/ 3	5/ 3	5/ 4	0	5/ 4	0	4/ 6	5/ 3	0	
Rose-breasted Grosbeak	5/19	5/13	--	5/13	--	5/11	--	5/25	--	5/13	5/10	5/25	5/10	0	5/15	--	5/17	5/10	5/10	
Evening Grosbeak	5/ 5	5/ 3	5/ 4	5/ 3	5/ 3	5/ 3	0	5/ 3	0	5/ 3	5/ 3	5/ 7	5/ 3	0	0	5/ 7	4/30	0	5/ 3w	
Purple Finch	5/ 5	5/ 4	5/ 3	5/12	--	5/ 8	--	5/31	5/ 3	5/ 3	5/ 4	5/ 4	--	5/ 3s	5/ 3	5/16	4/30	0	0	
Savannah Sparrow	5/ 8	5/ 7	--	5/13	4/26	0	0	5/17	0	--	--	5/10	0	5/ 3	5/ 3	5/ 3	5/10	--		
Northern Junco	5/ 3	5/ 3	5/ 3	5/ 3	5/ 3	5/ 3	--	5/ 3	5/ 3	4/17	4/24	5/ 6	5/ 3	5/ 3c	4/29	5/ 3	4/ 6	--	4/20	
Am. Tree Sparrow	3/24	3/21	5/ 3	--	--	2/17	--	3/15	--	4/27	--	3/17	--	--	3/25	0	--	--	--	
White-crowned Sparrow	5/ 9	5/ 3	5/ 3	--	5/16	5/ 3	0	5/ 4	0	5/ 3	5/ 3	5/10	5/ 3	5/ 3c	5/15	5/ 3	5/ 4	--	0	
White-throated Sparrow	5/12	5/10	5/ 3	5/ 3	5/10	5/11	5/ 3	6/13	5/10	5/13	5/10	5/25	5/10	5/3cs	5/13	5/19	5/ 3	5/10	5/11	
Fox Sparrow	4/ 8	3/25	4/17	0	0	3/29	3.25	3/25	0	4/10	3/10	3/16	3/18	3/17	3/22	4/ 6	3/16	0	0	
Lincoln's Sparrow	5/24	5/23	5/16	0	0	0	0	5/23	0	0	5/25	0	0	--	0	0	0	0	0	
Swamp Sparrow	5/10	5/11	--	--	--	--	--	5/11	5/10	--	5/25	--	5/10	--	--	5/14	--	5/10	--	

Redheads and 6 Greater Scaup in Baltimore harbor on Mar. 5. There were 16 Redheads at Piney Run on Mar. 25 (Ringler). The high count of Ring-necked Ducks was 90 at Denton on Mar. 6 (Hewitt). Blom counted 40 Ring-necks at Myrtle Grove on Mar. 19 and a late drake was on the Waterford Farm pond in Howard County on May 26 (M. Wallace). Late ducks in Baltimore harbor were 2 Canvasbacks on May 9 and 3 Lesser Scaup and 9 Ruddy Ducks on May 31 (Ringler). High counts of Buffleheads were 100 at Pt. Lookout on Apr. 11 (Blom) and 200 near Bellevue on Apr. 13 (Armistead). Blom estimated 500 Oldsquaws flying over Myrtle Grove on Mar. 19 with 3 more flocks heard after dark. He also estimated 400 Oldsquaws at Pt. Lookout on Apr. 11 and Armistead estimated 750 near Bellevue on Apr. 13. Bonham saw a female King Eider at Ocean City on Apr. 6 and two females with a second-year male were there on May 11 (Paul DuMont, et al.). Rare inland was a White-winged Scoter at Beltsville, Mar. 6-11 (Chuck Dupree, et al.). There were 3 White-wings in the Washington Channel on Mar. 9 (David Czaplak) and 100 at Sandy Pt. on May 10 (Wierenga). All of the reports of Surf Scoters came from the bay with 25 at Solomons on Mar. 11 (Blom, Reeder), 35 in Southern Dorchester County on Mar. 30 (Armistead, Perry), 150 at Calvert Cliffs on Apr. 1 (Blom), 2 near Bellevue on Apr. 4 (Armistead), and 6 at Pt. Lookout on Apr. 11 (Blom). There were 30 Common Mergansers on the Potomac at Seneca on Apr. 5 (Murphy, Don Messersmith). High counts of Red-breasted Mergansers were 35 in Talbot County on Mar. 23 (Allen), 65 on Deep Creek Lake on Mar. 27 (Pope) and 26 at Hooper Island on May 3 (Armistead, et al.).

Diurnal Raptors. In addition to the migration totals in Table 3 by Wierenga, several one-day counts were made in different parts of the state. On Mar. 20 at Rockville Wierenga counted 15 Turkey Vultures, 27 Red-tailed Hawks, and 7 American Kestrels. At the same location on Apr. 7 he saw 3 Ospreys; and on Apr. 23 there he counted 13 Sharp-shinned Hawks, 50 Broad-winged Hawks, and 2 Northern Harriers. On Apr. 11 near the village of Robbins in Dorchester County, Ludwig counted 11 Northern Harriers, 8 Turkey Vultures, 4 Ospreys, 1 Sharp-shinned Hawk, and 1 Rough-legged Hawk. At Beltsville on Apr. 15 the Hayes' counted 1 Red-tailed Hawk, 9 Broad-winged Hawks, 5 Sharp-shinned Hawks, 1 Cooper's Hawk, 1 Golden Eagle, 2 Ospreys, 1 American Kestrel, and 14 unidentified buteos. At Monkton on Apr. 29 Reid counted 716 hawks in 2 1/2 hours of afternoon watching. His tally was 11 Black Vultures, 70 Sharp-shinned Hawks, 2 Cooper's Hawks, 22 Red-tailed Hawks, 18 Red-shouldered Hawks, 472 Broad-winged Hawks, 85 Ospreys, 2 American Kestrels, 34 unidentified hawks, plus one Common Loon and 27 Canada Geese. He stated that winds were light from the southwest at the time. The Osprey total is extraordinary for the Piedmont. Other migrants were randomly reported. On Mar. 23 there were 22 Turkey Vultures seen over Baltimore (Ringler) and on Mar. 26 Reese counted 18 at Wye Mills. Robbins noted 46 Broad-winged Hawks at Laurel on Apr. 19. Rough-legged Hawks were seen on Mar. 14 at Remington Farms (Parks), on Mar. 30 at Elliott Island (Armistead, Perry), on Apr. 6 at Beltsville (B. Hayes), on Apr. 12 at Blackwater (Armistead), and on Apr. 24 at Patuxent WRC (Reeder, George Powell). There were more Bald Eagle sightings on the Potomac this year as well as the usual ones from the bay region. One was seen near the Wilson Bridge on Mar. 24 (Evan Wright). Armistead and Perry counted 12 in Southern Dorchester

County on Mar. 30. One adult was at Calvert Cliffs, Apr. 1 (Blom), an immature at Ft. Washington, Apr. 2 (Paul Skinner), 2 adults near Wayson's Corner, Apr. 23 (Mark Applebaum), an adult at Seneca on Apr. 26 (Richard Cleveland), and an immature at Oxon Hill on Apr. 29 (Tom Manuccia). Armistead also observed an immature Bald Eagle at Bellevue being harassed by an Osprey; the latter was probably distressed by its proximity to a nest. Early arriving Ospreys this year were seen at the east end of the Bay Bridge on Mar. 5 (Allen, Reese) and at Tanyard on Mar. 17 (E. Engle). A Peregrine Falcon was seen on May 3 in a stoop over the Patuxent River marsh near Western Branch, Prince Georges Co., a few miles north of the hacking site at Merkle WMA where 4 birds had been released the year before. The only Merlin reported were at Plum Pt. on Mar. 11 (Blom, Reeder), at Montgomery Village on Apr. 16 (Wierenga), and in Kent County on Mar. 22 and Apr. 18 (Parks).

Table 3 - Migrant Raptors in the Annapolis Area, Spring 1980

<u>Species</u>	<u>Total</u>	<u>First</u>	<u>Last</u>	<u>Highest Counts</u>
Turkey Vulture	212	3/ 8	5/ 3	37 on Mar. 26, 29 on Mar. 15, and 27 on Apr. 2
Black Vulture	11	4/10	4/11	7 on Apr. 10
Sharp-shinned Hawk	699	3/ 8	5/10	272 on Apr. 20, 126 on Apr. 25, and 55 on Apr. 11
Cooper's Hawk	22	3/ 8	5/ 2	7 on Apr. 20 and 3 on Mar. 8
Red-tailed Hawk	91	3/ 8	5/ 4	31 on Mar. 8, 20 on Apr. 2, and 11 on Mar. 15
Red-shouldered Hawk	21	3/ 8	4/10	10 on Mar. 15 and 4 on Mar. 8
Broad-winged Hawk	242	4/10	5/23	113 on Apr. 20, 37 on Apr. 11, and 28 on Apr. 25
Rough-legged Hawk	2	4/ 2		2 on Apr. 2
Bald Eagle	3	4/15	4/17	2 on Apr. 17 (all adults)
Northern Harrier	42	2/24	5/ 6	14 on Apr. 2, 8 on Apr. 25, and 4 on Apr. 15
Osprey	147	3/15	5/ 4	29 on Apr. 25, 21 on Apr. 2, and 19 on Apr. 15
Peregrine Falcon	1	3/15		
Merlin	10	4/ 9	5/ 3	2 on Apr. 25 and 29
American Kestrel	292	3/ 8	5/ 3	46 on Apr. 2, 37 on Apr. 10 and 11, and 34 on Apr. 9
Total	1,795	2/24	5/23	Approximately 50 days and 155 hours of observation.

Gallinaceous Birds. Armistead notes that a modest number of Ring-necked Pheasants have become established in the Lakesville-Robbins-Andrews area south of Shorter's Wharf near Blackwater Refuge "and may be heard crowing in the early morning far out in the scrub away from any houses." A Wild Turkey was heard at Lilypons on Mar. 29 by Don Weber and the Mehlmans. The Wild Turkey seen in a tree on the White House lawn on Apr. 22 was probably a practical joke. The Chukar seen near Oxford on Apr. 11 by Miles Leopold was probably an escape.

Rails and Gallinules. A King Rail was at Pt. Lookout on Apr. 6 (Blom, Reeder). Wierenga heard one flying over Sandy Pt. on May 3 at 4:30 a.m. Eddie Slaughter found 7 Clapper Rails at Ocean City on Mar. 4. Wierenga heard a Virginia Rail flying over his Annapolis house at 10 p.m. on Apr. 12. A Sora was at Lilypons on Apr. 12 (the Hannays) and Boone found them numerous in the Elliott Island marshes on Apr. 19, where Reese found 4 on May 25 and one at the end of the month, indicating that they may even breed there. The first Black Rail of the season arrived at Sandy Pt. on Apr. 26 and was joined by a second bird on May 1⁴; both remained into June and were probably breeding (Wierenga). Armistead's tally of rails in Southern Dorchester County on May 10 was 9 Kings, 1 Clapper, 97 Virginias, 12 Soras, and 12 Blacks, plus 7 Common Gallinules. Other Common Gallinules were found at Sparrows Pt. on Apr. 10 (Blom), Patuxent Wildlife Research Center (WRC) on Apr. 13 (Boone), and Upper Marlboro on Apr. 22 (Blom).

Shorebirds. There were 10 American Oystercatchers at Ocean City on Mar. 4 (Slaughter) and 10 on Hooper Island on Mar. 30 (Armistead, Perry). An American Avocet was seen by many observers at least during the period Apr. 6 through May 10, and perhaps the same bird was seen on the north end of Assateague on May 19 by Armistead and the Cutlers. Armistead saw 16 late Black-bellied Plovers near Bellevue on May 25. Wierenga reported three impressive flights of Whimbrels in late May. On May 18 he counted 69 in groups of 1, 20, and 48 flying past Sandy Pt. On May 20 he saw 75 over Annapolis and on May 24 he counted 26 at Elliott Island. John Cullom saw 15 Whimbrels at Back River on May 18. At least one Upland Sandpiper was seen at the Easton airport, Apr. 13 through May 3, with 5 there on Apr. 20 (Reese). Wierenga noted single Uplands at Annapolis on Apr. 22 and near Sandy Pt. on May 3 and 4. High counts for the season were 55 Greater Yellowlegs at Tanyard on Mar. 27 (E. Engle) and 33 Lesser Yellowlegs at the rouge lagoons in Allegany County on Apr. 28 (Paulus). There were 35 Solitary Sandpipers at Lilypons on Apr. 27 (Dermot Cooper). In the late afternoon of May 2 Fran Pope watched a Solitary Sandpiper "flycatching" at a small pond in Pleasant Valley. "It would walk along at the edge of the water and suddenly jump up into the air, with a light assist from its wings, snapping at small bugs that seemed to be swarming overhead." The first Willet was reported at Ocean City on Apr. 7 (Bonham) and others were at Elliott Island on Apr. 11 (Ludwig) and 2 near Bellevue on May 17 (Armistead). Paulus counted 37 Spotted Sandpipers at the rouge lagoons on May 16. The May 25 pelagic trip out of Ocean City produced 5 Northern Phalaropes. Short-billed Dowitchers are uncommon in the bay region, but 3 were in Kent County on Apr. 18 (Parks) and others were in Dorchester County on Apr. 19 (Ludwig) and near Bellevue on May 25 (Armistead). Eddie Slaughter saw 3 Red Knots at Ocean City on Mar. 4, perhaps indicative of movement by birds wintering north of the usual range, and Wierenga saw one at Sandy Pt. on May 11. Unusual Sanderling sightings were one at the rouge lagoons on May 15-19 (Paulus) and one in Kent County, May 15-20 (Parks). Western Sandpipers are rare in spring, but reports came from Ocean City, with 3 on May 11 (Murphy), Sandy Pt., with 2 on May 14-21 (Wierenga), and Kent County on May 20 (Parks). White-rumped Sandpipers were widely reported with sightings in Kent County by Parks on May 3, 9, and 15; 3 at Mountain Lake

Park on May 3 (Pope), 3 at Ocean City on May 10 (Hayes'), 3 at Elliott Island on May 10 (Armistead, Parks), up to 3 at Sandy Pt. May 14-21 (Wierenga), and 5 in Baltimore on May 18 (Knight). Two Dunlins were at Sandy Pt. on Mar. 16 (Paul Leifer), one was at Lilypoms on May 3 (D. Wallace), and one near Bellevue on May 25 (Armistead).

Gulls. An immature Glaucous Gull was seen by many observers at Ocean City at least from Apr. 5 through May 10. Other immatures were seen in Baltimore from Mar. 15 through May 9 (Ringler, et al.) and at Sandy Pt. on May 8 (Wierenga). Immature Iceland Gulls were seen at the following locations: sitting on an ice floe at the east end of the Bay Bridge on Mar. 5 (Allen, Stone, Reese), in Baltimore on Mar. 15 (Ringler), at Rockville on Apr. 3 (Wierenga), and at Sandy Pt., May 4 (Wierenga). Up to 2 adult Lesser Black-backed Gulls were at the Rockville landfill, Mar. 20 through Apr. 3, one was at Eastern Neck on Mar. 30 (Parks, Harvey Mudd), the bird at Ft. McHenry remained through Apr. 19 (Bielenberg), an adult and a sub-adult were at Sandy Pt. on Apr. 29 (Wierenga), and an immature was there on May 10 (Wierenga, Paul DuMont). Ring-billed Gulls remained by the thousands at the Rockville landfill into May and by the hundreds late into the month (Wierenga). The immature Black-headed Gull was last seen at Cabin Branch, Curtis Bay on Mar. 29 (Murphy), but possibly the same bird appeared at Back River on Apr. 10 and 12 (Blom, et al.). Two Laughing Gulls at Kent Island on Mar. 31 (Paul Leifer) were moderately early. Wierenga identified a sub-adult Franklin's Gull at Sandy Pt. on May 18 and found a differently marked individual of similar plumage there on the 20th. Paulus counted 61 Bonaparte's Gulls at the rouge lagoon on Apr. 15 and 2 late birds were in Cecil County on May 3 (Clark Jeschke). A Little Gull was at Ocean City on Mar. 5 (Slaughter) and 2 there on the 15th (B. W. Keelan). Another appeared at Back River on Apr. 10 and 12 (Blom, et al.) and 2 were there on the 13th (Stasz).

Terns, Puffin. An early Common Tern was at Back River on Apr. 12 (Ringler, et al.) and one at the rouge lagoon on Apr. 30 (Paulus) was unusual for Allegany County. Royal Terns were reported from three locations in the bay: 3 at Hooper Island on Mar. 30 and 53 there on May 3 (Armistead, et al.), 5 in Talbot County, Apr. 11 (Reese), and one at Sandy Pt. on Apr. 30 (Wierenga). A high count of 177 Caspian Terns was made in Baltimore harbor on Apr. 24 (Blom). The only Black Terns reported were one near Oakland on May 12 (Pope), one at Ocean City on May 15 (Bonham), and an amazing 4 at Lilypoms on the latter date (D. Wallace, et al.). Highlights of the May 25 pelagic trip out of Ocean City were an Arctic Tern, a possible Roseate Tern, and a totally unexpected breeding-plumaged Atlantic Puffin (Wierenga, et al.).

Owls. Wierenga did not spend much time listening for migrant Barn Owls this year but did hear a total of 9 birds from Mar. 16 through May 16. Hal also found 2 fledged Great Horned Owls at Sandy Pt. on May 7. Late departing birds from the winter were a Long-eared Owl at Piney Run on Apr. 5 (Ringler, et al.) and a Saw-whet Owl at Gude's Nursery in Rockville on Mar. 17 (Wierenga).

Caprimulgids, Kingfishers, Woodpeckers. A Chuck-will's-widow was

heard at Patuxent WRC on May 3. An early Whip-poor-will was at Federalsburg on Apr. 14 (Glime). Thayer noted Belted Kingfishers nest-building along the Youghiogheny River on Apr. 7. Red-bellied Woodpeckers are rather rare in the western mountains but Fran Pope saw one at Mountain Lake Park on Apr. 18 and Thayer saw a pair prospecting along the Yough on May 15. Wilkinson noted one at Frostburg on Apr. 25 where he had not seen the species before. Reese entertained a pair of Red-headed Woodpeckers in his yard at St. Michaels, May 14-18, but the birds were apparently just passing through.

Flycatchers. An early Eastern Kingbird was at Upper Marlboro on Apr. 10 (Conn.). Also early was a Great Crested Flycatcher in the Pocomoke Swamp on Apr. 19 (Boone). Margaret Donnald banded a Yellow-bellied Flycatcher at Adventure Sanctuary on May 16. Fran Pope counted 6 Alder Flycatchers singing at Cranesville swamp on May 22 and 4 at Hammel Glade Swamp on May 25. Wills and Rich Bray reported an Olive-sided Flycatcher north of Clarksburg on May 3.

Swallows, Jays. Early migrants were 4 Tree Swallows at Ft. Smallwood on Mar. 8 (Wierenga), a Barn Swallow at Shorter's Wharf, Dorchester Co. on Mar. 30 (Armistead, Perry), a Cliff Swallow at Cape St. Clair on Apr. 5 (Bob Augustine, Wierenga), and a Purple Martin at Pennyfield on Mar. 16 (Harvey Mudd). Six Cliff Swallows were at the Westminster Pike bridge over Liberty Reservoir on Apr. 13 (Ringler), and one at Blackwater on May 3 (Armistead, et al.) was rare for the Eastern Shore. The main flight of Blue Jays was slightly late this year with counts of 145 in Frederick County on May 3 (D. Wallace) and 55 at Laurel on May 4 (Robbins) being typical. The peak may have been on May 10 when observers in Anne Arundel County counted 2,738 Blue Jays.

Wrens. Early House Wrens were at Upper Marlboro possibly wintering on Mar. 24 (Conn.), in Baltimore on Apr. 6 (Bohanan), and at Laurel on Apr. 12 (Robbins). Wilkinson found 2 Bewick's Wrens at Dan's Rock on Apr. 18. A Carolina Wren near Savage River on May 3 (Pope) may indicate the species' return as a breeding bird in Garrett County. Armistead reports that no Sedge Wrens were found in Southern Dorchester County this spring.

Mimids, Thrushes. A Gray Catbird at Greensboro, Mar. 14-29, may have wintered locally as was certainly the case with the Brown Thrasher seen there through Mar. 14 (Hewitt). A late Hermit Thrush was in Laurel on May 9 (Robbins). Early migrants were a Swainson's Thrush in Bethesda on Apr. 22 (Mayanne Sansberry) and a Veery singing in Baltimore on Apr. 14 (Barber).

Gnatcatchers, Kinglet, Pipits. Blom found the earliest Blue-gray Gnatcatcher this year at Laurel on Mar. 30 and also made the highest count for this species at Myrtle Grove of 58 on Apr. 11. A late Golden-crowned Kinglet was at Henderson, Caroline Co. on May 3 (McKee). A flock of 25 Water Pipits in the Belfast Valley of northern Baltimore County on Apr. 13 had increased to 175 birds on Apr. 19 (Kaestner).

Shrikes, Vireos. The only Loggerhead Shrikes reported were at Back River on Mar. 25 (Ringler) and in Washington County, 3 on Apr. 23 (Boone). An early White-eyed Vireo was at Allen's Fresh on Apr. 11 (Blom) and an exceptionally early Solitary Vireo was seen along the Youghiogheny River on Apr. 9 and 10 (Thayer). Solitary Vireos seen in Frederick County on May 19 (D. Wallace) and May 22-23 (Slaughter) are probably indicative of a local breeding population. A Warbling Vireo at Concord on May 3 (Scudder) was a good find for the Eastern Shore.

Warblers. A few warblers took advantage of the early warm weather and the following early arrivals were noted: a Prothonotary Warbler at Seneca on Apr. 13 (Warfield), a Tennessee Warbler at Beltsville on Apr. 26 (Hayes'), a Nashville Warbler near Frostburg on Apr. 27 (Wilkinson), a Northern Parula Warbler at Upper Marlboro on Apr. 3 (Conn), a Black-throated Blue Warbler near Frostburg on Apr. 26 (Wilkinson), a singing male Black-throated Green Warbler at Laurel on Apr. 1-3 (Reeder), a Yellow-throated Warbler at Seneca on Apr. 6 (Warfield), a Prairie Warbler at Patuxent WRC on Apr. 3 (Kathy Klimkiewicz), and a Kentucky Warbler heard singing in Pocomoke Swamp on Apr. 19 (Boone). Other interesting sightings were a Prothonotary at Woodend Sanctuary in Chevy Chase on Apr. 21 (Phil DuMont), and a Cerulean Warbler in Talbot County on May 3 (Coble, Kleen). The only Golden-winged Warblers reported were one banded at Adventure Sanctuary on Apr. 30 (Donnald), one in Talbot County on May 3 (Kleen, Coble), and singles in Kent County on May 3 and 9 (Parks). A Blue-winged Warbler was flushed from a nest with 4 eggs in the Baltimore County part of Patapsco State Park near Woodstock on May 17 (Ringler). The hybrid "Lawrence's" Warbler was seen in 3 locations: near Fletcher's Boathouse along the Potomac on May 3 (B. Hayes), near Lyon's Creek in Anne Arundel County on May 3 (Klockner), and on Roosevelt Island in the Potomac on May 9 (Cash). A "Brewster's" Warbler hybrid was seen at Tolchester on May 3 (Mendinhal, Gruber). Except for banded birds the only Mourning Warblers reported were at the National Arboretum on May 10 (the Caswells) and near Potomac on May 27 (Wilkinson). Finally Robbins saw a late male Yellow-rumped Warbler at Laurel on May 31.

Blackbirds. Early Bobolinks were noted on Apr. 18 with 1 at Gortner (Pope) and 10 in the Belfast Valley (Kaestner). The peak count at the latter location was 400-500 on May 6. Other counts were 50 in Talbot County on May 6 (Reese) and 300 at Locust Grove on May 10 (D. Wallace). A late Rusty Blackbird was at Robbins in Dorchester County on May 3 (Armistead, Perry). Blom saw a Boat-tailed Grackle at Pt. Lookout and another 5 about a mile north of there on Mar. 19. He followed up this with a sighting of a pair at Pt. Lookout on Apr. 11. The male was singing and defending the territory against Fish Crows and the female was observed carrying a small stick. This is a new breeding location for Boat-tails as they have not been known to nest on the Western Shore.

Tanager, Finches. An early Summer Tanager was at Federalsburg on Apr. 20 (Glime). Also early was a Rose-breasted Grosbeak at Darnestown, Montgomery Co. on Apr. 16 (Marjorie Leach). An Indigo Bunting at Upper Marlboro on Mar. 26 (Conn) was exceptionally early for a migrant; the possibility of wintering nearby should be considered. Dickcissels

appeared at two feeding stations, one in Rockville, Apr. 7-11 (Mrs. Charles Bicking), and one near Capitol Hill on Apr. 16 (Joy Chapper).

Sparrows, Longspurs and Bunting. An early Savannah Sparrow was at Pt. Lookout on Mar. 19 (Blom). Boone found 3 Henslow's Sparrows near Elliott Island on Apr. 18 and the high count there was 6 on May 10 (Armitstead, Parks). "Oregon" Juncos were seen at Denton through Mar. 16 (Fletcher) and in Baltimore on Mar. 28-31 (Shirley Geddes). A late Fox Sparrow was at Mt. Nebo on Apr. 17 (Pope). Of the 7 Lincoln's Sparrows banded at Adventure Sanctuary this spring 4 were netted on May 11 (Donnald). Two Lapland Longspurs were still at Summit Hall Turf Farm on Mar. 9 (Clark Baker) and 6 were seen along Oland Road in southern Frederick County on Mar. 15 (Dermot Cooper). Parks found one Lapland Longspur in Kent County with a flock of 150 Snow Buntings on Mar. 3.

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